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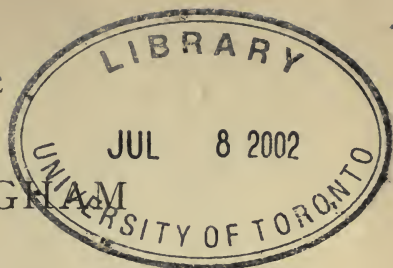




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THE
BIRMINGHAM MEDICAL REVIEW.
JULY, 1884.

ORIGINAL COMMUNICATIONS.

THE SURGERY OF THE KIDNEY.

BY LAWSON TAIT, F.R.C.S.
SURGEON TO THE BIRMINGHAM AND MIDLAND COUNTIES HOSPITAL
FOR WOMEN.

DR. KEITH has recently complained that the restless surgery of to-day lets nothing rest. For my part I share in this restlessness to a large extent, and am not disposed to be quiet so long as there remains any field for a further advance in surgery. Ever since I had the acquaintance of Simon, of Heidelberg, and made an actual inspection of his wonderful case of nephrectomy, the first that was ever done successfully, I have felt that the kidney was a legitimate field for surgical enterprise. Simon's operation was performed for the cure of ureteral fistula which had been made during a hysterectomy, and it was completely successful. He proved that we could successfully imitate the process adapted by nature in the congenital absence of one kidney, making the single organ do the work of both. He was, however, clear sighted enough to see, and I well remember his telling me that it was one thing to remove a kidney with an almost positive assurance that its companion was left in a perfectly healthy state, fit to carry on the function and likely to undergo an increase in size and functional activity, to do the whole work required; but an altogether different matter to remove a diseased

organ with a strong probability that the other was more or less similarly affected.

Simon's proceeding was wholly justifiable, as was proved by the result ; but I am much disposed to doubt if as much can be said of many of our more recent attempts at removing kidneys.

I have a list of nephrectomies completed up to date, one hundred and twenty in all, and the recoveries number only fifty-eight, and this speaks of the primary results only. Of the secondary results almost nothing is known. It is clear from the dates of the great majority of cases, that as soon as publication is possible the cases are set forth and we know nothing more about them. Very many of the successful cases are like Simon's—what might be called primary operations, as extrusion of the kidney through a wound, cases which are in no way comparable to those in which a diseased kidney is removed. The same thing may be said of a number of "painful floating kidneys" removed, which are noted to be healthy in appearance and without appearance of disease of any kind, cases also of ureteral fistula. Of such primary cases there are 25 with 5 deaths, a mortality of more than 24%. Of cases of really diseased kidneys there are in my list 84, and of these only 40 survived the operation. How many were really relieved or cured by it we shall probably never know. From this list I have had to eliminate 11 cases as so doubtfully recorded that it is impossible to accept the statements about them. The general results may be given to the effect that the general mortality of nephrectomy is about 43%, but that the removal of kidneys that are not diseased is only half (25%) of that which is the result of the removal of diseased kidneys (50%). This is quite enough to show that the two classes must not be mixed up together in a table of statistics any more than one may mix up primary and secondary amputations.

Of the primary cases we find 13 in which the kidney was removed by a lumbar incision with two deaths. Of the 12 cases in which an abdominal incision was practised there were four deaths, so that the mortality in the method of operating is double that of the lumbar incision.

This is not what I should have anticipated, and yet perhaps it is what might have been expected, seeing that the cases are from the practices of a large number of operators. The figures, however, are too small to teach anything with certainty, though as a rule I think it may be argued that as it would be easier to remove a healthy kidney by a lumbar incision than by an abdominal section, so probably it would be safer. There is, however, this strong argument against the lumbar incision: suppose that an operator proceeds to remove what he believes to be a painful floating kidney, and finds after he has removed the kidney he has neither removed the moving tumour nor relieved the patient's pain, he will have done something not much to his own credit nor to the advancement of his art. I know a case, not published, where this actually occurred, and I shall have to return to this interesting subject when I speak of floating kidneys.

In my list of operations for the removal of diseased kidneys, I find that the lumbar incision was practised in 89 cases with 19 deaths. In 45 cases, the abdominal incision was made, and there were 29 deaths. Here again the figures do not help to much certainty in conclusion, for though the lumbar incision has the better mortality of the two methods, the statistical statement requires two qualifications. In the first place, where the lumbar region was selected the operators were right in all the cases in their belief that the tumour was a kidney, whilst in the abdominal section the operations were begun in a great variety of beliefs; often that the tumour was ovarian.

In the second place, the tumours removed by the lumbar incision were very much smaller than those in the other class.

There is one argument against the lumbar incision, and in favour of the abdominal section, which seems to me unanswerable, and in its favour evidence is to be seen in the great majority of fatal cases, where the facts are carefully recorded. It is clear that the fatal issue is due, in the great majority of instances, to the diseased condition of the second kidney. Two methods of ascertaining the adequacy of the other organ have been suggested; one fanciful and ridiculous, and the other possibly of use, though I have had no opportunity of trying it. Tyler Smith, many years ago, made a proposal for the dilatation of the Fallopian tubes for the cure of sterility. Equally practicable is the process described by Dr. Newman in a recent paper (*Glasgow Medical Journal*, August, 1883) for the catheterisation of the ureters, so that an examination of the separate secretion of each kidney might be made.

Something more practicable lies in the suggestion by Dr. Douglas Powell, that if a reasonable approach is made to the normal amount of urea secreted, it may be assumed that the second kidney is healthy. There is this difficulty, however, that as a single kidney will secrete that normal amount, by reason of its hypertrophy, it is just possible that the remaining tissue in action of both kidneys might do the same, and therefore the test would lead to a mistake. If, under this condition, one kidney was removed, half, or more than half, of the acting tissue might go with it, and death would result. It is perfectly clear that this has happened in very many of the fatal cases.

The argument for the abdominal section is, therefore,

that by it the condition of the second kidney may be ascertained before the first is removed, and a fatal operation prevented if the second one is found very much diseased. There is also an operative argument in favour of the abdominal section, of which I have experienced not a few illustrations. I have begun an abdominal section with the intention of removing the kidney, and found that opening and draining it served the purpose perfectly well. This is not possible in the lumbar operation till at least half the kidney has been separated from its surroundings.

In my own practice I have been singularly fortunate with kidneys. I have attacked them twelve times, and in every instance with success, that is, not only have the patients recovered from the operation, but they have been completely cured. The table is as follows:—

Nephrectomy for pyronephrosis and calculus	1
Nephrotomy for abscess	4
„ for hydronephrosis	4
„ for hydatids	3
	12

I have a list of twenty other cases compiled from various sources, including all the cases I can find since 1879. All the operations were performed for pyelitis, pyronephrosis and calculus, and five of the cases died.

A good deal of attention has lately been devoted to the subject of floating or movable kidney, and several recent writers have levelled their pens at me because I have expressed myself sceptical on this subject. The views which are thus objected to were published in a letter to the *British Medical Journal* of January, 1883. My words are these: “but confining the term ‘movable kidney’ to the state in which the kidney moves by reason of the existence of a mesonephron, I have never seen, nor is

there recorded so far as I can discover, any instance where by this kind of mobility a 'movable kidney' has been an incident of any pathological importance."

To these views I adhere. I am entirely sceptical about a kidney being painful because it is movable. I cannot in the least see why a kidney should be painful because it is movable. A mesonephron must be a congenital condition, and the cases of painful floating kidney do not give histories of life-long sufferings. I was even sceptical about the occurrence of a mesonephron, for I could not find one in the museums, and I believed they would be there if they had been seen. I am in possession now, however, of satisfactory evidence that mesonephra do occur very rarely. But they are always discovered accidentally, and generally after death; and my statement that no case had been put on record where a movable kidney was an incident of pathological importance, is quite correct. Dr. Newman, in the Glasgow Medical Journal, says—"Several cases of floating kidney have been recorded, and if Mr. Tait had taken the trouble to look up the literature of the subject he would no doubt have come across them." Dr. Newman goes on to say that he may mention two of them (as if he had dozens in reserve) where it is distinctly stated that a mesonephron was found to be present. These are, first, a case in the Medical Times and Gazette for 1859, where a kidney with a mesonephron was found, but not a word is said about its being an incident of pathological importance. The patient was suffering from diseased vertebræ, and therefore the movable kidney was discovered by accident. The second case was given on the authority of Dr. Priestley, but it is a mere misuse of words to call the four lines in which this case is discussed, a "description of a case," and even in these not a word occurs suggesting that the

movability of the kidney was of the slightest pathological importance. In fact, Dr. Newman's criticism is not marked by candour.

Dr. Seymour Sharkey, of St. Thomas's Hospital has also attacked me concerning my disbelief in the pathological importance of "movable kidneys." It so happens that I have just now a patient under my care who has been for some considerable time under Dr. Sharkey for a movable kidney. I believe it to be a distended gall bladder, and in a day or two I shall know who is right. (It turned out to be a tumour of the head of the pancreas.)

The original reasons for my scepticism have been given before, but I may repeat them, as they have increased in number. I have had pass through my hands a number of cases in which the diagnosis of movable kidney had been made, and made wrongfully in every particular. They amount to thirteen in number. Seven times the movable kidney has turned out to be a distended gall bladder, and I have performed cholecystotomy successfully in every instance. In four instances the tumours have been ovarian cystomata, with long pedicles, and these I have removed successfully. The remaining two have been tumours of the pancreas, for which I have been able to do nothing. With such an experience, I think my want of faith in the pathological importance of movable kidneys is to be excused. But it is still more defensible when I examine the literature of the subject, literature which it is evident that Dr. Newman is not capable of rightly interpreting. Thus he gravely quotes Skorczewsky's paper on the subject, and apparently accepts its conclusions. Anything more absurd than the statements of this writer it is difficult to imagine; there is not a *post mortem* record in it, and he asks us to believe

that movable kidney, *as a malady*, is to be met with in two and a half per cent. of patients examined promiscuously. He sits down in an out-patient room, apparently, and examines 1,422 patients indiscriminately, and diagnoses movable kidney with a fluent accuracy which must excite the envy of all who have to do with abdominal surgery. With a larger experience, I venture to say he will do, as I have learnt to do, by the experience of mistakes—never be sure of an abdominal diagnosis till the abdomen is opened, either before or after death.

Since the discussion on my paper, two other contributions on the subject have appeared, both worthy of notice. One is an article in the *Revue de Médecine*, anonymous, giving three cases of supposed movable kidney. In only one was a *post mortem* obtained, and the tumour was found to be a gall bladder full of calculi. This paper contains a lesson by which Dr. Sharkey, Dr. Newman, and Dr. Skorzewsky may all profit.

The other paper curiously enough appears in the October number of the *Glasgow Medical Journal*, and is by Dr. J. Lindsay Steven. The *post mortem* of two cases of "movable kidney" are given, and it is noted that in neither case was the condition suspected during life.

So far, the evidence is in favour of my view, that "movable kidney has not yet been shown to be a condition of any pathological importance."

To one point I must draw attention in conclusion, and that is the vast majority of painful and enlarged kidneys occur in the right side of the body. I have never seen an enlarged kidney in the left side. For this curious distribution of disease there must be some reason, for my experience is now too large for it to be due to mere coincidence.

RANDOM RECOLLECTIONS OF EIGHTEEN YEARS' EXPERIENCE OF A PARISH MEDICAL OFFICER.*

BY JABEZ JACKSON, M.R.C.P. EDIN., L.F.P.S. GLASGOW, L.S.A. LONDON.

Mr. President and Gentlemen,

THE reading of a paper on Poor Law Relief, in April last, by a member of this Society, of whose death we have all recently heard with regret, Dr. Hickinbotham made me reflect on my experiences in that kind of work, and brought a conviction to my mind, perhaps an erroneous one, that some of the facts connected with those experiences might not be without interest if read before a society of this kind.

If I had known at the time of my appointment as a Parish Medical Officer of Birmingham of the numerous pitfalls that were ultimately to be placed in my path; of the petty annoyances of which I was expected, as time passed on, to be the uncomplaining victim; of the trials of temper and tests of physical endurance I was to be subjected to, it is quite certain that I should have taken the kind and excellent advice of my friends, Drs. Johnstone and Bassett, and that my services would never have been placed at the disposal of a body composed like that of the Birmingham Board of Guardians.

Twenty years ago, whilst practising in a village in Leicestershire, I observed that the best men in the district were those who held the parish appointments, and I then conceived the idea that my way to success was by obtaining a similar one myself; so when I removed to Birmingham, a year or so later, I began to look out for the chance of an appointment to one of those posts. My search was not long unrewarded, for in March, 1866, I

* Read before the Midland Medical Society, April, 1884.

was appointed to a vacancy on the parish medical staff caused by the resignation of the late Dr. White. My troubles soon began.

I had held office I think only a few weeks when I received an order to attend a person who, when I arrived at the residence, I found dead. My list was a long one, and I had not received the slightest intimation that the case was more than ordinarily urgent. I could not certify, and an inquest had to be held. At the next meeting of the Board of Guardians one of those peculiar individuals who seem to be possessed of a belief that they are endowed with a sort of divine mission to reverse the relative position of things, and to settle details on subjects they know nothing at all about, moved a resolution virtually amounting to a vote of censure on myself, but as the rest of the Board were not of his thinking, and he was unable to find a seconder, his attempt to jeopardise my position happily proved abortive. Nevertheless, it appeared to me a scandalous thing that it should be possible for an individual pursuing the dignified calling of a publican, and sitting at the table of the Board of Guardians, to move, in opposition to the opinion of those of his colleagues who were capable of forming one, a resolution that was intended to be personally injurious to a professional man, even though it had not an inch of ground to support it. More scandalous still was it for this individual to take upon himself to write to the Poor Law Board and to give a distorted version of the facts.

At that time the medical officers were appointed annually, and owing to the above circumstances my position was somewhat endangered when I went up for re-election. However, the machinations of my enemy or enemies prevailed not, and I was re-elected. But see what might have happened from private pique, either on the part of a member of the Board or an outsider who

had converted a member into a catspaw. That was one of the evils of annual appointments, an evil not much greater than that resulting from the Guardians having the power to dismiss their medical officers, of which I shall proceed presently to speak.

At the meeting I have just alluded to a proposal was made to increase the medical staff from six to eight. This was done on the ground that the existing staff was not large enough to cope with the work of this great parish; a reason which, considering that Guardians, as a rule, are not distinguished for any generous acknowledgment of the status and services of medical men, could not have been arrived at, it is fair to assume, until after a due consideration amounting almost to a painful process of mental flagellation. Yet, what happens? The new arrangements exist for two years, during which time the population of the parish and, consequently, the work of the parish doctors had increased instead of diminished. The Board again proceed to consider the dimensions of their medical staff, and decide that it ought to be reduced to five. I need not dwell on this peculiar exhibition of official logic. Three of the medical officers had, consequently, to be dismissed from their appointments. Amongst them was Mr. Hoare, the oldest officer amongst us; he had held the appointment for 23 years, and had arrived at an age when the chief fruits of the profession are expected to be reaped by its members.

Whether Mr. Hoare was dismissed because he had acquired a special aptitude for attending the sick poor, or because the Guardians thought him too venerable and kind hearted a man to be entrusted with the physicking of pauper patients I will not attempt to determine, but one fact connected with the dismissal is well worth mentioning. While the Board were deliberating as to which of their officers should be sent to the right about, a member

suggested that the medical relief books be sent for and inspected. On comparison being made it was found that Mr. Hoare's book represented the largest amount of expenditure in relief. The two facts in juxtaposition may appear significant, but of course I would be the last to insinuate such a thing.

Up to this time we had seen our patients at our own homes, and provided them with medicines. Our salaries were £150 a year, with vaccination fees; and, as Dr. Heslop once sagaciously pointed out, in order to insure that the poor should have all needful drugs and appliances, the doctor's stipend included the cost of them.

Shortly after this, owing mainly to the praiseworthy exertions of Mr. John Clay, who was at that time a member of the Board, the dispensary was established and consulting rooms provided at which we could see all those of our pauper patients who were able to attend there, visiting at their own homes only such as were unable to do so. Too much praise could not be given to Mr. Clay and others for the indefatigable work they did in bringing about this alteration, which has proved the greatest boon that could be imagined both to patients and medical officers. But these alterations were not without their drawbacks; for whereas up to this time we had been receiving vaccination fees, the Guardians, with characteristic kindness, now appointed Dr. Robinson public vaccinator, and part of our fees were lost in consequence.

This brings me to the evil I have previously alluded to, namely, the deprivation caused to the poor when the Guardians had the power of dismissing their medical officers. This subject was alluded to by Dr. Robinson at the meeting to which I have referred, who then pointed out, that at the time I allude to the medical officers dare not order sufficient necessaries for their pauper patients, lest by doing so they should give offence to the extrava-

gantly economical section of the Board, and so endanger their prospects of re-election.

The doctors' independence, and security for the proper treatment of the poor, were no doubt in the opinion of the Guardians amply guaranteed by this arrangement, and there are some who, by their recent endeavours to get the medical appointments made annual again, think so now. I have the audacity, like Dr. Robinson, to differ from them. The usual attitude of the Guardians on the question of relief to the sick poor has been defined by Dr. Heslop in language I may be permitted to quote.—“Wine and meat cost money—this comes from the pockets of the tax-payers—the surgeon who orders too freely such articles injures this last estimable person, and thereby becomes an undesirable officer. It is all a matter of sentiment after all. No doubt some poor people want nourishment rather than physic; but why did they become poor? Why should the honest burgesses be burdened with payments of this sort, because the surgeon is weak and unable to comprehend the difference between a respectable ratepayer and a poor wretch who thinks he needs that his body should be sustained.”

And then Dr. Heslop (I have been quoting from his pamphlet on “The Realities of Medical Attendance on the Sick Poor in Large Towns”), Dr. Heslop, I say, summarises the requirements of the parish doctor in this formula—“Any surgeon in a large town is good enough for the services of the Guardians if only he is bad enough.” With Dr. Heslop's definition, if I alter the word is good enough to “may be good enough,” I, for my part, am not inclined to find fault. But what makes, or rather made at the time Dr. Heslop's words were written, the parish doctor so objectionable a member of the profession? Was it not the knowledge that he must fall in with the cheese-paring policy of the Guardians if he was

to retain his appointment. Would he not be the same despicable violater of conscientious duty now as then if the Guardians only had power to cancel his appointment at their pleasure? But I have been anticipating.

At the time of the appointment of a Public Vaccinator considerable turmoil was occasioned by the annual election of Medical Officers, and long-continued correspondence went on between the Board of Guardians and the head authorities in London. At length the Poor Law Board addressed a letter to each of the medical officers requesting them to give their views of the working of the existing arrangements. In my answer I stated that it was simply impossible for a medical officer to do his duty fearlessly and with that amount of independence of action which every medical officer ought to possess whilst dealing with the sick poor, so long as he had to study the particular whims and fancies of 120 Guardians, and go up annually for re-election. Before the next Board day came round the Poor Law Board had issued their order that forthwith every medical officer's appointment should be made for life, subject to the usual conditions.

At the meeting to which I have alluded Dr. Hickinbotham urged that we should revert from the existing state of things to that which I have briefly described in the language of Dr. Heslop. My random recollections as a Parish Medical Officer make me regard such a proposal with a feeling akin to horror. Such a change would be a terrible disaster to the sick poor, and would certainly end in disgrace to the whole community. It is true, as Dr. Hickinbotham said, that there are men holding parochial medical appointments whose conduct justifies the terms which he applied to them, viz., brutal, etc.

I once knew one who boasted that he attended 1011 paupers during 11 weeks, and all the physic they ever had from him was made from two-pennyworth of logwood

which his assistant fetched from the druggist's and never paid for, and a jug of oil of vitriol which he obtained from a carboy in the next yard. He said, "When I was appointed to — district I looked out for an assistant, and found one who answered my purpose very well. I bargained with him that he should have £1 per week, and for which he should do all the work, find all the physic, and pay the rent of a house to be used as a surgery for the paupers to come to; I lived," he said, "at another part of the town myself. I used to go down to the surgery soon after ten o'clock each morning, and always found the place full of paupers, sometimes 40, 50, or 60 of them. I used to walk in, and looking round me, said, What do you all want? I soon ascertained that most of them wanted notes for food. I separated them by saying, now all of you that want physic come on this side, and all who want grub on this. Of course they nearly all went on the grub side. I then attended to the few who wanted physic, and sent them off; then walking to the door, I opened it wide and said, now you can all go, there'll be no grub given away to day. Of course," he continued, "I couldn't carry this on for ever, so the next day I varied it as follows:—When I had attended to all those on the physic side I said to those waiting for grub—now the Guardians have given orders that none of you are to have any more grub until you've been vaccinated; there's a lot of small-pox about. Off with your coats, you men, and up with your sleeves, you women; and they all had to be done, young and old, whether they liked it or not. So that for every note I gave for grub I got eighteen pence for vaccinating them."

But what does this prove? Does it prove that the Guardians should have the power of dismissing doctors who treat their patients as they ought to be treated? Or does it prove that the Guardians ought not to have

entrusted to them the duty of appointing the medical officers at all? Can it be said that a Board composed for the most part of men constantly engaged in the sordid pursuit of making money is the best that can be constituted for so delicate a task as that of appointing members of a liberal profession who, if they act conscientiously in discharging their duties, must, to some extent, come into conflict with the notions of cheese-paring economy possessed by the defenders of the "honest burgesses" as against the interests of the suffering poor.

As illustrating the kind of treatment the Guardians sometimes pursue towards persons recommended by their medical officers for the receipt of relief as well as medicine, I will read a rough copy of a letter written by a clergyman and sent to one of the local papers (though not inserted), the particulars in which, I can testify from personal knowledge, are strictly true :—

"To the Editor—Sir—I have lately read a good deal in your paper about the way paupers are treated by their medical officers, but have recently come across a case of what I consider shameful treatment by the Guardians themselves. It appears that a poor woman whose husband was suffering from consumption and unable to provide for herself and two children, applied to the Relieving Officer for assistance. The Relieving Officer and the Medical Officer both visited the case in due course, and the woman was ordered to attend before a Committee of the Board on the following Tuesday morning. Her case was gone into, when she was addressed by the Chairman of that Committee in the following manner :—'We consider you ought to be ashamed of yourself to bring children into the world to make paupers of them. You ought to be ashamed of yourself to allow children to be born when you know they will take your husband's complaint, and that he will die and leave you to provide for

them. It is such as you that take the food that other people ought to eat, and it is as bad as thieving. We shall give you this relief for a month, and if ever you show your face here again we shall look upon it as a great piece of impertinence, and treat it accordingly.'—I shall never forget my feelings when this poor woman told her story as the tears rolled down her cheeks, for a more clean, decent, respectable, and industrious woman I have seldom met with; and if this had been a case where the medical officer had been afraid to give the requisite nourishment, it is very probable we should have heard of a scandal in the shape of a death from starvation. These are the persons who consider they ought to have control over the action of their medical officers. I can only say, God forbid! Another case, where a woman had a sound dressing for allowing herself to be in the family way whilst her husband was suffering from Bright's disease, and was talked to as follows, by the Chairman (not a medical man):—'We look upon your case as a very bad one. This disease from which your husband is suffering is very slow in its progress, and there is no doubt that he was suffering from it at the time you became pregnant,' etc. Here the Chairman of the Board showed himself off to poor advantage, for one member of the Board having taken a good deal of trouble to investigate the case, with a determination to make an example of it, was asked by the Chairman, as a personal favour to himself, not to make the particulars known, as he otherwise would have done, for he said a more brutal case he had never met with, and that it made him cry to hear the poor woman's story. She said, 'it was bad enough to have to go before a room full of gentlemen, in her condition, but to be talked to in such a way was the worst punishment she had ever been called upon to endure.'"

But I think I have said sufficient to substantiate my position, that not only ought they not to have the power of dismissing their medical officers, but that they have done enough to show that they ought no longer to retain the power of appointing them.

In conclusion, let me mention two matters as illustrating the kind of treatment the Birmingham Board of Guardians are capable of doling out to the medical officers who have served them, I venture to say, well, for periods varying from eighteen to twenty-six years.

For this period it has been the custom to pay the medical officers a lump sum of £5 per year for certifying all so-called pauper lunatics prior to admission into the Lunatic Asylum. This sum represented nearly two shillings per case. We were all convinced that the way things were being done was as illegal as it could possibly be, and we tried over and over again, but in vain, to get it altered. What happens? When the Local Government Board refuse any longer to allow the course adopted to be continued, the Guardians turn round upon us, and say, if we are compelled to pay more we will not pay it to you, we will have an independent officer to certify all these cases, and pay him the full fee of 10/6 each for them; and they form a deputation to wait upon the Magistrates to obtain their sanction to the alteration. They did sanction it; and I venture to say that, although so far as the Guardians were concerned it was quite on a par with all they have been noted for in my experience, the action of the Borough Justices themselves reflected no credit on them, because there was no pretence that the work had not been well and properly performed. Why, this is treatment that not one in this room would be guilty of towards his coachman, and yet Guardians have no hesitation in inflicting such injustice on their medical men,

Now for the quarterly visits of pauper imbeciles at their own homes which has recently placed us before the whole country as in the light of rogues and dishonest men.

When I took office eighteen years ago, the Clerk to the Guardians sent for me and handed me a list, saying, you will be required to visit these cases once in each quarter, and certify their condition as to being clean and properly cared for. You will be paid two and sixpence per case, and any other cases you come in contact with you must add to your list from time to time. This has been regularly done and passed each quarter for all these years, and now they suddenly find out that we have been robbing the parish by putting down cases we had no business to, when, in fact, we have simply been carrying out the instructions given to us by their clerk. Besides which the lists have been sent in each quarter to be checked by the relieving officer and clerk, and yet until now nothing has ever been pointed out to us as being otherwise than perfectly correct.

Although there has been no alteration in the law the Guardians have evidently become aware that it is their duty to check these lists and to keep us informed of the persons who cease to be in the receipt of relief, as for the first time during my eighteen years of office I have recently received a letter from the Clerk to the Board of Guardians, enclosing a list of names of persons who I was informed were not now paupers, and that it was no part of my duty to visit them as district medical officer.

I think we have reason to complain of the conduct of the Chairman of the Board of Guardians, who allowed a member to read an *ex parte* statement, and to indulge in severe remarks reflecting seriously upon the conduct of the medical officers, without affording them any opportunity of explanation, and this in the presence of reporters who speedily gave the fullest publicity to the accusations.

As a matter of common justice, and proper order of business, this should never have been permitted.

The facts I have narrated, as having come within my own experience ; the constant endeavours of the Guardians to annoy and harass their medical officers ; to cavil at their conduct, to increase their work and reduce their remuneration, are sufficient to prove, if proof were needed, that a parish doctor's life is not one of unsullied bliss, nor his couch a bed of roses. It is the hardest lot in the medical profession, and if there are any junior members of it here to-night who have any notion of embracing it, let me advise them to think twice before they make so false a step. Recollect the kind of treatment you are likely to receive from those who appoint you and who consider themselves your masters. Bear in mind the miserable remuneration you obtain in return for faithful services performed day and night under difficult conditions, and always amid poverty-stricken and often heartrending surroundings. Reflect on the injury that is likely to be done to your private practice, if you have one ; and do not lose sight of the fact, that if you have not, the holding of such a position will very effectually prevent your obtaining it, at any rate, until after the stigma attaching to such an appointment has for some time been removed. And then, having well considered all these circumstances, accept the life of a parish doctor if you choose ; but wiser by far to endure (if necessary) straitened circumstances for a few years than subject yourself to the constant annoyances of an impertinent set of men such as the majority of those with whom you will be called upon to deal for so long a time as it may be your misfortune to hold a parish appointment.

CEREBELLAR DISEASE WITH CROSSED PARALYSIS.

BY C. W. SUCKLING, M.D., M.R.C.P.
PHYSICIAN TO THE QUEEN'S HOSPITAL.

W. H., a man aged 48, a fitter ; has been a soldier, and has served in India. He had syphilis when a young man, but was otherwise quite well until about two years ago, when he suffered from headache and giddiness, with obstinate constipation. He suffered occasionally with shooting pains in the right arm, and also had deficient control over his rectum and bladder. The patient has been gradually getting worse up to the present time (Feb. 25th, 1884). He sleeps badly, and his memory is not as good as it was. His intellect appears to be clear. The bowels are confined. His appetite is good, but he has suffered from persistent vomiting for the last six weeks. He always vomits after he takes food ; but also, independently of food, especially in the morning. The vomiting is not attended with nausea. He suffers from headache, which at first was occipital but is now frontal. The headache is severe and paroxysmal, and the patient has a wearied look indicative of suffering. He suffers from active vertigo ; objects appearing to move to the right. He cannot walk without help, and his gait is reeling ; the patient staggering and always falling to the right side. He has paresis of the right side ; the grasp of the right hand being much weaker than that of the left. The triceps and biceps reflexes are exaggerated on the right side, clonus being obtained by tapping the lower end of the right radius. The patellar reflex is exaggerated on the right side, and there is also ankle clonus, but no front

tap contraction. The gluteal, lumbar, and scapular reflexes are absent. The plantar, cremasteric, and epigastric well marked. Sensation is perfect. Pupils respond to accommodation freely, but not so readily to light. Both arms tremble, but especially the right, all the movements of which are attended with tremor. The tongue points to the opposite side, *i. e.*, to the left; whereas in ordinary hemiplegia it points to the same side. The deflection of the tongue is marked, and the left half appears smaller than the right. The tongue also is tremulous. The optic discs are normal, only a few white lines along the vessels being observed.

The patient was admitted into the Queen's Hospital on the 25th of February. He suffered severely from cerebral vomiting, which was at once checked by hourly drop doses of *vin. ipecac.*, and has not recurred since. He also was much constipated. The patient was treated with iodide of potassium (*gr. xxv.* twice a day), and improved greatly. His gait became steadier; the headache ceased; and the grasp of the hand was stronger. It was noticed that there was a periodicity in the attacks of headache, and the stagger to the right was well seen when he was ordered to turn round quickly. The patient was kept in six weeks, and then discharged much improved. He is still under treatment as an out-patient, and still shows the slight hemiplegia and the deflection of the tongue.

As to the diagnosis:—The cephalalgia, vertigo, and vomiting, point to some cerebral lesion; and were there double optic neuritis the diagnosis of tumour would be positive; but this may have been present at one time, and have resolved, for the patient has been ailing two years. The staggering and periodical headache indicate that the lesion is in the cerebellum; and from the fact that he

always staggers to the right side we may infer that the lesion is in the right lobe of the cerebellum. But he has also a cross paralysis, for there is paresis of the right side of the body, and paralysis of the left half of the tongue. We can explain this by supposing that the lesion in the right lobe of the cerebellum has compressed or invaded the motor tract in the medulla, below the decussation of the motor fibres, thus causing hemiparesis and descending degeneration of the crossed pyramidal tract in the right side of the cord. And we may suppose that the nucleus of the left hypoglossal nerve has also been affected. Now it is difficult to imagine a lesion of the cerebellum picking out the nucleus of one nerve only; but the nucleus of the hypoglossal is low down in the medulla. There is no sign of any lesion of the vagus, glossopharyngeal or spinal accessory nerves.

As to the nature of the lesion:—It is probably gummatous, for there is a distinct history of syphilis, and the man improved greatly under the influence of iodide of potassium. The prognosis is, I think, bad, being rendered much worse by the symptoms of mischief in the fourth ventricle.

We are told by many authorities that in cerebral lesions the superficial reflexes are diminished. They are not diminished in this case; and in dozens of cases of hemiplegia that I have examined I have never found the superficial reflexes diminished; on the contrary, they have generally been increased.

REVIEWS.

SCIENCE AND SINGING.*

AMONG the numerous writers who, of late years, have presumed to patronise, from an outside position, the art of song, few are now so prominent as Mr. Lennox Browne; and he approaches it as an authority and as a dictator; neither as an enquirer nor as a suggester. He not only writes as the mouthpiece and representative of the medical profession, and as the school-master and corrector of all other writers, from whatsoever aspect of approach, but also as the scientific discoverer and corroborator of what he thinks is the "lost" old Italian mode of voice culture. The position he takes is a bold one, and carries with it a grave responsibility, for if Mr. Browne misinterpret or misunderstand an art tradition, he is leading musicians and the public into error and failure. Claiming by his calling to be "scientific," we ask what branch of science in this does he represent? It would appear he restricts science in voice to optics and anatomy, but "vocal physiology" (p. 7), for which here and elsewhere he pleads, implies a definition and an explanation of the physiological differences, say, between the raw voice of a student and that voice when the student emerges from the academy a highly finished artist. What are the material changes and differences between an untrained and a trained voice? In none of Mr. Browne's writings can we trace any attempt to meet this question, and he seems to content himself with drawing deductions from the voice of Mr. Behnke, whose voice may be ill-produced or may never have been trained.

If, as alleged, knowledge of vocal physiology be beneficial, then that man who poses as the highest authority in such direction must also pose as the best producer of beautiful voice, or admit his science is a pseudo-science incapable of producing in himself what he alleges it will produce in another. It is a "fanciful doctrine," made,

* Science and Singing. By Lennox Browne.

like the historical razors, to sell ; a doctrine false to fact, and, therefore, injurious to art. The old school in its "sound empiricism" was extremely practical, and would not admit any authority save that of those who had gone through the curriculum of the schools. It is said, Madame Mara, when told of a new singer, used to ask, "Can she sing four notes?" (G to C). A physician diagnoses the disease and prescribes the remedy ; a pharmacist, not necessarily a physiologist, prepares the medicine ; the patient takes it ; and the drugs, in right action, and subject to internal affinity, produce the cure. Would the cure be more effectual if the patient knew physiology ? Would the chemicals be more effectual if the patient knew it ? It would appear that Mr. Browne is confusing physiology with pathology, for he did not advise the lady who had "entirely lost her voice" to study "vocal physiology," but he advised her to "go home to bed, to take no medicine whatever, and rest well" (p. 19). Probably, as regards "Science and Singing" an analogy between a surgeon and a voice-setter is nearer the mark ; a surgeon tells injured (not diseased) patients what to do, and how to do it, but he does not tell them what their bodily parts look like, or what they do ; nor yet how these parts act in relationship each to the other. He gives abstractions on the material, particularisations on the immaterial side.

Again, physicians know that disease flies to the weakest parts ; parts used resist evil influence from without ; parts disused, by becoming enfeebled, may yield. Here Mr. Browne seems to advance argument from the same objective state in support of contrary conclusions. In attacking Mr. Carter Moffat, to whom he gives eight of his thirty-six pages, Mr. Browne advances the thought that atmosphere has nothing to do with beauty and strength of voice, for he says, "Italian vocalists in England do not lose their own special brilliance of tone" (p. 27), *i. e.*, they are unaffected by climate ; and an objector, and a critic of Mr. Browne, went further, saying he was "in the habit of dining frequently with professional singers, and had noticed that at the end of a very heavy dinner, consisting of a dozen or fifteen courses, those singers would get up and be enabled to sing most beautifully," and this too at "smoking concerts" (p. 20). This resisting power of nature is endorsed by all who have

had to do with singers; and good producers of voice know that right production stands with impunity where false production fails. Mr. Browne, speaking of Mr. Behnke, to whose authority he appears to restrict himself, says that Mr. Behnke during a "laryngoscopic demonstration entirely lost his voice" (p. 18), attributing this loss to the state of atmosphere in which Mr. Behnke was found. But might not the loss have resulted rather from bad production? Would the singers before referred to have lost their voices under similar conditions? Probably not; and when we are further told (p. 33), that Mr. Browne saw Mr. Behnke's vocal cords under illumination, and "they were of a deep red colour," a physiologist might naturally suspect that they were in a state of high congestion. Mr. Browne objects to artificial irritation, but why not be consistent? If "cayenne pepper lozenges" and "peroxide of hydrogen" "injure the epithelium of the skin and produce itching," what must the continuous insertion of the laryngoscope do? It may, perhaps, render the mucous lining insensitive or dead, and so ruin all sympathetic multiplication of tone. At all events, singers with "stage panic" find quality gone, and attribute the loss to dryness of throat and mouth.

Now we get to another branch of natural philosophy, namely, the relativity of forces to each other. Mr. Browne very properly observes, that singers "should be in a position to attain the largest amount of force in the easiest way, and expend that force with the greatest economy" (p. 14). Science asks for a physical explanation, but Mr. Browne furnishes us with none. We know that as the strength of a chain is its weakest link, and the value of a rope or cable is within its breaking weight, so the test of an imprisoned fluid centres at the aperture of the vessel in which such fluid is compressed. The more air is compressed the greater the pressure, and the louder the explosion when released; and if a continuous state of similar compression be sustained, the result is a tone, continuous in power equal to its commencement. This is the philosophy of true as contrasted with false production; and the unsolved material problem before physiologists is—What enables the larynx to resist the maximum pressure that can be brought to bear upon it from below?

As Mr. Browne claims, in this work, not only to repre-

sent science—which we have seen he does not—but also the old school of art in song, let us see how far his claim is good in this latter direction. In his “Voice, Song, and Speech,” we are instructed to practice a “koo.” This shows how necessary it is to have learned, Madame Seiler, Mr. Curwen, Mr. Plumptre, Rev. J. P. Sandlands, and others, have all fallen into this misconception of the “*coup de glotte*,” a lesson from a qualified practitioner like Signor Garcia would have saved them from this error. Again, Mr. Browne tells students to study soft vocal practice, while physiologists say that muscular development results from work at full flexion; and Garcia writes, “The exercises should be habitually studied in full voice, for it is more difficult to develop the intensity of sound than to repress it.” The advocacy of mimicry, or converting one voice into the semblance of another, so that “it is often difficult to distinguish whether a produced tone be that of the male or the female” (p. 31), is a distinct perversion of the old school, for that school prided itself on making a voice characteristic, irrespective of its compass or its pitch. We remember Mrs. Howard Paul affecting to sing as Mr. Sims Reeves, but it was only a caricature of this artist; and to play at guessing sexes (p. 31) by placing students behind a screen is scarcely above the region of the grotesque; a ventriloquist would do the deception better.

The use of physiological knowledge in vocal art is confined to deciding controversial points; these settled, physiology is useless both to the singer and the teacher. There are phenomena as yet unexplained, and it is the duty of any artist who has inherited traditions to submit such to the investigations of scientists, for without the assistance of trained voices it is impossible for anyone to form a scientific school, and any such attempt must be a failure. It is only union and communion between the artistic and scientific world that can effect this, for the voice presents many curious problems; it may be right acoustically (beautiful in tone), but wrong physiologically (unbalanced in forces); it may be right physiologically, wrong acoustically (wrong in re-inforcement); it may be right both physiologically and acoustically, but wrong psychically (uncontrollable). That farther research is needed is true; that physiologists can help is also true;

probably such help will best be found in comparative anatomy of the larynges of song birds; but those who undertake the work must take into their council singers who have been successfully trained. A congress of scientists and singers—and, perhaps, students in various stages of training—might do something permanently beneficial, but, the dogmatism of a writer such as Mr. Browne can only result in bringing into disrepute the holders of those traditions he affects to admire, but so persistently perverts. Mr. Browne says, "It is difficult to conceive the idea of a good ballet-dancer who should be (? is) blind" (p. 10); but to us it is more difficult to conceive the idea of a good voice authority who has never learned to sing.

VOICE, SONG, AND SPEECH.*

THIS book is evidently a reduplication, with additions, of "The Mechanism of the Human Voice," by Behnke, and "Medical Hints on the Singing Voice," by Lennox Browne. Out of 308 pages of matter there are thirty pages of quotations, sixteen of illustrations, and six of blanks. In the illustrations we are struck with the very imperfect manner in which some of them are detailed, *e.g.*, page 39, section of the human body, the sternum is deliberately divided into three parts, whereas everyone knows it is a continuous piece of bone and cartilage; then on page 42 the clavicle is too low down in the chest, and the cage which contains the lungs is not sufficiently high in the chest, and is too small; besides which allowance is not made for the position of the heart. The same mistake occurs on page 110, the cage is not wide

* Voice, Song, and Speech. A Practical Guide for Singers and Speakers; from the combined view of Vocal Surgeon and Voice Trainer. By Lennox Browne, F.R.C.S. Edin., Senior Surgeon to the Central Throat and Ear Hospital; Surgeon and Aural-Surgeon to the Royal Society of Musicians; Author of "The Throat and its Diseases," "Medical Hints on the Singing Voice," &c., and Emil Behnke; Lecturer on Vocal Physiology and Teacher of Voice production; Author of "The Mechanism of the Human Voice," &c. London: Sampson Lowe, Marston, Searle, and Rivington, Crown Buildings, 188, Fleet Street. 1883.

enough, the consequence being that the first rib and the clavicle are out of place with regard to the scapulæ. The same thing applies to the drawing on page 112, here the lungs are seen *in situ*, the apices of which are contained in the root of the neck, while the heart occupies the centre of the chest, having a very slight inclination to the left.

In most of the drawings, commencing at page 160, it will be found that they are imperfect from the fact they do not represent the parts as symmetrical. No. 25 is quite uneven; No. 28 ditto; on page 178, letters A and B, the same thing occurs. What shall we say as to the photographs of the larynx? They are all distorted, presumably through the mirror being held at an angle from the camera, which, while allowing of perfect focussing, caused the parts to appear distorted, this is seen in all four photographs on page 35, and if we turn to the frontispiece we shall find the same thing prevails; if one drew a line through the middle of the face, it would cut across the chords obliquely.

On the subject of respiration on page 45, Mr. Behnke seems to be a little at sea in his physiology, for we find him calling the venous blood "dark blue," a statement, which, if we did not find it further on, we should be inclined to think was a mistake of the printer. We find it again on pages 103 and 189, where he speaks of it as "dark blue," so that he evidently thinks the blood is made that colour by the action of CO_2 . The whole subject of respiration is handled in a very crude manner, although Mr. Behnke is accredited with equalling Prof. Huxley in his exposition of this matter. When Huxley's *Physiology* is published at four and sixpence, and is of so simple a character that it is within the mental grasp of every singer, we do not see the necessity for an interpretation of his masterly chapter on respiration in such an unmasterly *résumé*.

The whole of the chapter on the voice-box, or larynx, is very confusing from the fact that the numbers employed do not represent the same thing, *e.g.*, page 52, fig. 7, the trachea is marked 14; in fig. 8, it is marked 16; in fig. 9, 11; in fig. 10, not at all; in fig. 11, 9; in fig. 14, not at all; in figs. 15 and 16, it is marked 16. On page 59 it says "the vocal ligaments are generally called the vocal cords; this term is misleading, as it implies

strings like those for instance of the violin, which are attached only at either end, and are free at every other point. This, as we have just seen, is not the case, the 'cords' being free only along their inner edges." Here the authors appear to have run away with the idea that the word "cord" means "a string," whereas the derivation of the word arises from a geometrical word "chord," which signifies "a right line which joins the two ends of any arc of a circle, otherwise called a subtense" (Bailey). No doubt several anatomists have of late taken to call them vocal "cords," but Huxley when he does not call them "vocal ligaments," speaks of them as "vocal chords." The word "chorda" signifies "a bowel," "a gut"; "also the string of a musical instrument made of a gut," and the word "cord" signifies "a rope or line," so that the word "chord" has been made by later writers to signify a gut or string, to the utter exclusion of the primitive meaning of the word.

In the brief historical account of the invention of the laryngoscope, there are several omissions and mistakes. "In the year 1825, Mons. Cagniard de Latour made an unsuccessful endeavour to examine the larynx during life" (Mackenzie.) Babbington's attempt should be 1829, instead of 1827. Dr. Bennati's, of Paris, in the year 1832 is omitted, and Avery's should be in 1844, instead of 1840. The date of Garcia's invention is 1854, this also is omitted; while Türck and Czermak have no date assigned to them at all. Their share in the work of this discovery took place in 1857.

On page 183 we find "diagrams illustrating the varying capacity of the chest," which are only the same diagrams elaborated which appear on page 16 of "Medical Hints on the Production and Management of the Singing Voice," by Lennox Browne.

With regard to the rules on breathing they seem in every way to be excellent, and we quite agree with our Authors, when they say "we hope that we shall hear no more of the shock of the upper glottis."

The rules too, contained in the chapter on resonance are very good, and no doubt will bear fruit. The question of the soft palate is one on which there is, at the present, very little literature; but one can easily imagine that the production of certain tones would cause such a movable body to alter its form. We are glad to see

that in the chapter on "The Daily Life of a Voice User," exception is taken to the drinking of tea. There are two faults which the public commit with regard to taking tea : the first is, that it is drunk as hot as it can be borne ; the second, that they let it brew until it contains a large amount of tannic acid, which is proportional to the time that the leaves remain in contact with the water ; besides which there is the alkaloid contained in the tea. The daily use of a drug must end in some disaster, if not of the alimentary, then of the respiratory tract, or circulatory system ; such diseases as flatulent dyspepsia, non-suppurative catarrh of the tympanum, and Trousseau's vertigo a stomacho læso, are examples.

The chapter on "Defects of Speech, Stammering," &c., is only elementary, and does not pretend to give the subject full consideration. In the appendix, an account is given of the circumstances under which the photographs of Mr. Behnke's larynx were attempted. A similar account has already appeared in the Brit. Med. Jour. of October 27, 1883. The book is got up throughout in a popular style.

REPORTS OF SOCIETIES.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH OF
THE BRITISH MEDICAL ASSOCIATION.

PATHOLOGICAL SECTION.

Ordinary Meeting, January 25th, 1884.

Mr. LLOYD OWEN in the Chair.

DISCUSSION ON THE SURGERY OF THE KIDNEY.

Mr. Lawson Tait opened the discussion by reading a paper (v. p. 1).

Mr. William Thomas showed a patient, *æt.* 12, on whom he had performed the operation of nephrotomy. The boy was admitted into the Children's Hospital Feb. 28th, 1883, with a tumour the size of a child's head occupying the left lumbar, and reaching into the contiguous hypochondriac and iliac regions. There was an indefinite sense of fluctuation about it; its diagnosis was uncertain; and exploratory section of the abdomen was decided on.

On March 25th an incision about two inches long was made through the skin along the outer border of the left rectus abdominis, and continued through the aponeuroses of the internal oblique and transversalis muscles. A thin membrane was next divided, and immediately the kidney appeared; it was large and fluctuating, but its structure seemed quite healthy. A fine trocar was introduced, and about 14 f. oz. of pale yellowish, slightly turbid fluid drawn off. The kidney was then incised to the depth of an inch, when the cavity was opened. Its interior was soft and velvety, and bled freely with the slight pressure of examination. No calculus was present, nor could any communication be found between it and the ureter. The wound in the kidney was united to that in the abdominal wall by continuous silk suture, a drainage tube inserted,

and about 12 oz. of bloody fluid drawn off through it. The case progressed favourably, but until the present time a considerable amount of purulent fluid had continued to drain away, the quantity now being about 5 oz. per day. The boy's health was good, but he was somewhat inconvenienced by the discharge, which necessitated his wearing an apparatus.

Mr. Thomas remarked on the rarity of a kidney with a mesonephron, as seen on *post mortem* examination, and stated his belief that the single horse-shoe kidney was much more frequently met with, and might be puzzling. In such a case the median incision would present the greatest advantages; but when it was known which kidney was diseased he believed the best incision for any operation on it would be along the outer border of the rectus muscle of the same side; and if more room were required, a transverse incision outward from this. With regard to the action of solvents on calculi, he had recently seen a case in which all the symptoms of a stone in the bladder, and which was demonstrated by the sound, had quite disappeared under the exhibition of bicarbonate of potash, and he did not see why the same process might not go on when the stone was in the pelvis of the kidney or ureter.

Mr. J. W. Taylor showed a case of hydronephrosis, or dilatation of the pelvis of the left kidney in a young girl. This had been treated by abdominal section, a glass drainage-tube being passed into the sac, from which urine has since been constantly draining. The left ureter was apparently completely occluded, any attempt to close the fistula causing dangerous symptoms. The case derived additional interest from the fact that the sac had burst, the urine was extravasated into the peritoneal cavity, and the patient appeared to be rapidly sinking at the time of operation.

Mr. Vincent Jackson said that the title of the paper—Surgery of the Kidney—brought to his recollection the remark of a well known surgical writer who stated in the year 1873 that, in his opinion, "the art of surgery has already attained to something like finality of perfection," but that observation was completely refuted by the progress which practical surgery made in the next decade, and in no department had more been accomplished than in that

of the so called abdominal surgery, as a proof of which he mentioned the well known truth that the abdomen was opened daily for exploration, or for the removal of diseased structures from every organ it contained excepting the pancreas and supra renal capsules. The choice of the operation, whether extra or intra peritoneal, for the ablation of the kidney must generally be a matter for the personal settlement of the surgeon; but certain diseased conditions of the organ, hydronephrosis and pyonephrosis, whatever may be his predilection will probably compel him to prefer lumbar nephrectomy. Again, in many cases of stone of the kidney nephrectomy ought to be preferred to nephro-lithotomy. The latter operation may, and does, successfully remove the cause for a time, but the effect of that cause, urinary irritation with purulent urine still continues; a nephrectomy would remove both cause and effect. A suggestion was also made that in some cases of injury of the kidney a life might be saved if the diseased organ was removed, and in this direction it was hoped that the surgery of the kidney might in the future still further advance.

Dr. Windle maintained, on purely pathological and theoretical grounds, that in the large majority of cases the abdominal incision was the preferable one in nephrectomy, since it permitted an examination of the other kidney. He also considered that hæmorrhage could be more easily and safely controlled by that method than by the lumbar operation.

Mr. Bennett May, having referred to a communication which he had previously made on the subject of suppression of urine from calculus in the ureter and its possible relief by nephrotomy, considered that the choice between nephrotomy and nephrectomy might well present many difficulties in certain cases, particularly of suppurating kidneys. There was room for legitimate divergence of opinion, easily reconciled by a comparison of the objects aimed at and the risks prepared to be run. Nephrotomy was not likely to effect a complete cure, at least he had never heard of such until Mr. Lawson Tait mentioned his four cases, the particulars of which ought certainly to be published in full; but then it was not likely to kill. However, a nephrotomy having been determined on, he thought there was no doubt as to the

best way of doing it. He saw no reason why we should depart from the usual rules of surgery, and why a renal abscess should be submitted to the disadvantage of being opened at its least dependent part simply for the honour of having it done through the peritoneal cavity. The proposition became intelligible on one principle only, viz., that all surgery was to be approached through the abdominal cavity. He thought Mr. Tait had fairly stated the case between lumbar and abdominal section for nephrectomy, and also the merits of this operation generally. He (Mr. May) had removed a scrofulous kidney, weighing 14 ounces, through a lumbar incision without wounding the peritoneum; but that was certainly the largest he should ever wish to attempt through the limited space at disposal. The advantage claimed for the abdominal section of permitting the adequacy of the other organ to be determined was more plausible than real. He regarded Dr. Windle's communication as a most praiseworthy one, and he was not surprised that Mr. Tait should value it highly, as it appeared to give support to his own views. It contained both fact and reasoning, but it was an example of the fallacy and danger of applying such facts, mere pathological curiosities, and such theoretical reasoning to practical surgery. Would anyone be deterred from the lumbar exploration of a calculous kidney because the organ might have sunk below the level of the iliac crest? Such a thing had never yet been encountered. Would anyone open the abdominal cavity in order that he might fall back on the privilege of ligaturing the abdominal aorta in case of hæmorrhage from an aberrant renal artery? Practical surgeons need not be influenced by such far-fetched notions.

The cases shown by Mr. Taylor and Mr. Thomas were of great interest and value. The former seemed undoubtedly a hydronephrosis from gradual occlusion of the ureter. He could see no practicable means of re-opening this or of closing the fistula; and there was much in Mr. Taylor's objection to removing the kidney. Mr. Thomas's was more likely an independent renal cyst, and might have a chance of closing in time.

Mr. Jordan Lloyd said that it was not necessary that a moveable kidney should possess a mesonephron. In proof that such kidneys were "incidents of pathological

importance," he reminded Mr. Tait of six nephrectomies reported by Martin, of Berlin,—five of which were performed for this condition. The various operations for nephrectomy would be better if spoken of as intra or extra-peritoneal, rather than abdominal or lumbar, because the major difference between the two classes lay in the fact that the peritoneal cavity was opened or not. All nephrectomies should be performed if possible extra-peritoneally; either by lumbar incision, T-shaped, oblique, or vertical, or by lateral incision, as suggested by Thornton. The only condition calling for intra-peritoneal operation was that of very large solid tumours, just as in lithotomy, the supra-pubic operation was reserved for calculi too large to be removed per perinæum. He had seen a kidney removed through the loin for traumatic suppurative nephritis, 8 in. long and 15 in girth. He wished to call attention in the operation of nephrotomy to a distinct layer of fascia situated in the renal fat, and beneath the fascia lumborum, often temporarily mistaken for peritoneum; to the mobility of the kidney with respiration; to the trifling and easily controllable hæmorrhage following posterior incision through kidney tissue into the pelvis, and to the occasional absence of hæmaturia after the operation.

Mr. Gilbert Barling said, Mr. May in his remarks has, to a great extent, anticipated what I proposed to consider specially this evening, viz.:—the treatment of obstructive suppression of urine. With him I cordially agree that surgery should attempt to relieve the patient by cutting down on the recently obstructed side (posteriorly) with the object of providing an exit for urine directly from the pelvis of the kidney. There are one or two minor points however to which I must allude, first as to the time during which complete suppression may exist before causing the death of the patient, which is, I believe, longer than Mr. May stated, and though on the average about 10 to 12 days it may extend to as many as twenty, so that generally there is ample time for consideration and action if the suppression is not relieved by nature. Another point where I differ from Mr. May is when he states that patients do not die of uræmia. This does not appear to me to be correct; it is true that the uræmic manifestations are not the same as

arise in Bright's disease, but it is evident that retention of some of the urinary constituents must be the evil, both in obstructive and ordinary suppression; what the exact substance may be in either case we do not know.

I should like to take exception to one course advocated by Mr. Vincent Jackson, viz.: that nephro-lithotomy should be performed from the front, that is through the abdomen. My objection to this is that almost always the operation is in the first instance exploratory, and although in the hands of a few surgeons who have had special experience in abdominal surgery, exploration through the abdomen may be very safe, I doubt if this would be so in the hands of general surgeons who, I believe, would get better results by confining themselves to the lumbar operation, for the death of a patient whose exploration had been undertaken and no calculus found would be a calamity both to the surgeon and to the operation.

Dr. Hosack Fraser was of opinion that implicit confidence should not be placed on the results of examinations of the urine drawn from the opposite kidney as a means of ascertaining its condition, and mentioned cases in which the urine was perfectly healthy from the commencement of the disease to its termination. He strongly advocated the use of solvents in cases of renal calculi before having recourse to operative procedure, and narrated the facts relating to one of his cases in which the patient was completely cured by the use of alkaline carbonates. He showed how difficult it was sometimes to distinguish an enlarged spleen from a tumour of the left kidney. He thought that cases of renal cancer were suitable for surgical interference if nephrectomy was performed in the earlier stages of the disease.

PATHOLOGICAL AND CLINICAL SECTION.

Ordinary Meeting, March 28th, 1884.

D. C. LLOYD OWEN, F.R.C.S.I., in the Chair.

Sequestrum of the Entire Shaft of the Radius.—Mr. Bartleet showed a sequestrum of the entire shaft of the radius, removed by him from the arm of a patient under his care. The disease had been in existence three months;

but no new bone was formed from the periosteum, which had everywhere separated from the sequestrum. He contrasted the rapidity with which separation was effected, in this case, with the extreme tediousness of cases of necrosis affecting the flat bones of the skull.—Mr. Bennett May and Mr. Jordan Lloyd cited similar cases, the latter suggesting that, in some instances at least, the disease was rather the result of osteo-myelitis than of periostitis.

The Classification of Cirrhosis of the Liver.—Dr. Saundby showed a microscopic specimen from a case of hypertrophic cirrhosis of the liver, in which numerous newly formed biliary canaliculi could be seen naturally injected by inspissated bile. In this case, which had been under observation from its commencement, there had never been any jaundice; ascites was present in moderate amount; and the liver, which at one time nearly filled the abdomen, was much enlarged at the time of death. The surface of the organ was smooth, and, on section, the liver-tissue was stained yellow, and surrounded by tracts of grey fibrous tissue. The arrangement of the fibrous new growth was multilobular and interlobular; but the liver-cells were proliferating and fatty, and there were numerous biliary canaliculi round the margins of the acini. This case illustrated the inexactness of the views of the French school, which attempted to divide cirrhosis into two types—common and biliary cirrhosis—in which the latter form was characterised, clinically, by enlargement of the liver, early jaundice, and absence of ascites; and, histologically, by the new growth being monolobular and intralobular, the liver-cells proliferating, and, most of all, by the numerous newly formed biliary canaliculi. This case conformed in all respects to the type of common cirrhosis, with the exception that the liver was enlarged, that the liver-cells were proliferating, and the biliary canaliculi were numerous. It therefore shared the characters of both the so-called types, which were creatures of the imagination, not pathological realities.

Cases of Albuminuria in Surgery.—Mr. Gilbert Barling read notes of several cases which had come under his notice in the surgical wards, in which albuminuria had been present. He drew especial attention to the following points:—1, the necessity for careful examination of the urine previous to performing operations in surgery; 2, the

beneficial effects of operative proceedings in certain cases when the albuminuria was apparently dependent upon degenerative (amyloid ?) changes.

Molluscum Contagiosum.—Dr. Saundby showed a microscopical section of an excised tumour, from a case of molluscum contagiosum, and drew attention to the character of the contents, which differed from ordinary sebaceous matter, and appeared to consist of a vitreous or hyaline degeneration of the secreting cells.

Sarcoma of Tibia.—Mr. Jordan Lloyd showed (for Mr. Wilders) a giant-celled sarcoma of the upper end of the tibia.

MIDLAND MEDICAL SOCIETY.

Ordinary Meeting, April 2nd, 1884.

G. F. BODINGTON, M.D., President, in the Chair.

Orbital Cellulitis and Abscess.—Mr. Eales recorded several instructive cases which had come under his care. While not denying that this condition might occur spontaneously, more especially in the rheumatic and gouty, he thought that, if traumatism, erysipelas, and pyæmia were excluded on the one hand, and disease in the neighbouring bones and cavities on the other, few cases could be classed as spontaneous. The teeth should always be carefully examined, as they were often the cause of orbital cellulitis. Loss of sight from atrophy of the optic nerve often followed these cases, and was probably due to optic neuritis, or to thrombosis of the retinal vessels.

Hypertrophied and Sacculated Bladder.—Mr. Chavasse showed a specimen of this condition from a patient aged 71, who for many years had suffered from a tight urethral stricture. It was finally necessary to perform perineal section, but pneumonia proved fatal twelve days after the operation. The saccules were three in number, the two largest being of the size of a hen's egg, the smallest equal to the dimensions of a walnut. No calculi were present; the kidneys of the patient were slightly granular.

Enchondroma of Upper Extremity.—Mr. Haslam showed a boy, aged 13, with enchondromata of the fingers of the

right hand and forearm. It was noticed first on the ring-finger when about four years of age, and attributed by the parents to an injury. The forearm was about one inch and a half shorter than the left. There was a growth at the lower end of the ulna, another on the olecranon, and the head of the radius was pushed forwards on to the anterior aspect of the humerus, apparently by another growth in the neighbourhood of the capitellum; but notwithstanding this dislocation the movements of the forearm were as free as those of the other side.

Reflex Amblyopia.—Mr. Priestley Smith exhibited a series of perimeter-charts from patients suffering from reflex amblyopia. The condition was characterised by a variable concentric contraction of the field of vision. It had given rise to much speculation. Charcot had attributed it to central lesion, but there was reason to believe that it was in all cases a true peripheral anæsthesia, caused by reflex contraction of the blood-vessels which nourish the retina. Reflex amblyopia appeared to imply an over sensitive state of the nervous system, together with some determining or exciting cause. The exciting causes in the cases exhibited were fright or shock in one case, excess of brain-work at school in two, extraction of molar teeth in one, injury of the other eye in one, disease of the ovaries and Fallopian tubes in one. In the last named case one eye had been permanently blinded by thrombosis during temporary lowering of the ocular circulation, and the other was many times threatened in the same manner, but recovered completely after the removal, by Dr. Malins, of the ovaries and Fallopian tubes. In several of the charts the characteristic tendency to rapid fatigue of the retina, while under examination, was visible in the peculiar spiral form taken by the line bounding the field of vision.

Sphygmographic Tracings.—Dr. Suckling showed pulse-tracings, taken with Dudgeon's instrument, from cases of mitral disease, aortic disease, pneumonia, aneurysm, arteroma, Bright's disease, and constipation; and he pointed out the use of the sphygmograph in localising thoracic aneurisms, and in the prognosis of pneumonia.

Ordinary Meeting, April 16th.

G. F. BODINGTON, M.D., President, in the Chair.

Ligature of the Common Carotid Artery.—Mr. Bennett May read notes of a case of hæmorrhage from the external auditory meatus, treated by ligature of the common carotid artery. The patient had recently had scarlatina; profuse arterial hæmorrhage set in on the twenty-third day of the disease, and the third day from the appearance of suppuration within the meatus. The operation, which was followed by aphasia for three weeks, had been completely successful. Mr. May also showed a woman, aged 50 years, whose upper jaw he had excised eighteen months previously for a soft round-celled sarcoma, expanding the cavity of the antrum. Mr. May considered the case illustrated the well-recognised immunity from recurrence which often attends the removal of these malignant tumours from this region, when the disease is sufficiently circumscribed to permit complete extirpation.

Excision of Uterine Appendages.—Dr. Malins showed an enlarged ovary and dilated tube, taken from a patient aged 28, married nine years; no family. From the same patient the remnants of a dermoid cyst of the opposite side were removed, two drainage-tubes were used, and removed on the fifth day. The patient has since done well.

Round-celled Sarcoma of Femur—Epithelioma of Tongue.—Dr. Barling showed for Mr. Bartleet a stump of the femur, with round-celled sarcoma, removed at the hip-joint from a man 20 years of age. The limb was amputated at the lower third of femur nine months previously, for sarcoma of the head of the fibula. After the amputation at the hip-joint, although little blood was lost, the patient suffered for some hours from profound shock, but is now practically well. Dr. Barling also showed a specimen of epithelioma of the tongue, removed from a man aged 56. There was a history of about five months' duration. The growth affected the left side of the tongue, and slightly the floor of the mouth. There were enlarged glands at the left angle of the jaw. The operation performed was as follows:—A horse-shoe shaped incision was made along the lower border of the inferior maxilla, with a median incision, reaching from the symphysis to the hyoid bone, then by dissecting down a small flap on each

side, each lingual artery was tied at the digastric angle. The tissues of the floor of the mouth were divided with scissors, then the base of the tongue severed close to the hyoid bone, and a ligature passed through the epiglottis. The enlarged gland was also removed. Hardly any blood was lost, and the patient bore the operation well. A drainage tube was fastened in the floor of the mouth and opened into the neck in front of the hyoid bone. The after treatment consisted in frequent syringing of the mouth with Condy's fluid, which ran out freely through the drain; and in the administration of nutriment, at first by enemata, afterwards by means of an india-rubber catheter passed through the nose. On the fourth day the right knee and wrist became painful and swollen, and the patient died on the sixth day with these joints much distended. There were no rigors and but little fever, and there was no evidence of pneumonia. No autopsy was allowed.

MEDICAL NEWS.

THE PREVENTION OF BLINDNESS IN INFANCY.—(Based upon the directions of the Society for the Prevention of Blindness.)—One of the most frequent causes of blindness is the inflammation of the eyes of new-born babies. Yet this is a disease which can be entirely prevented by cleanliness, and always cured if taken in time. The essential precautions against the disease are:—
1. Immediately after the birth of the baby, and before anything else is done, wipe the eyelids and all parts surrounding the eyes with a soft dry linen rag; soon afterwards wash these parts with tepid water before any other part is touched. 2. Avoid exposing the baby to cold air; do not take it into the open air in cold weather; dress the infant warmly, and cover its head, because cold is also one of the causes of this eye-disease.—When the disease appears it is easily and at once recognised by the redness, swelling, and heat of the eyelids, and by the discharge of yellowish white matter from the eye. Immediately on the appearance of these signs seek the advice

of a medical man ; but in the meantime proceed at once to keep the eyes as clean as possible by very frequently cleansing away the discharge. It is the discharge which does the mischief. The cleansing of the eye is best done in this way :—1. Separate the eyelids with the finger and thumb, and wash out the matter by allowing a gentle stream of lukewarm water to run between them from a piece of rag or cotton-wool held two or three inches above the eyes. 2. Then move the eyelids up and down and from side to side in a gentle, rubbing way, to bring out the matter from below them ; then wipe it or wash it off in the same manner. This cleansing will take three or four minutes, and it is to be repeated regularly every half-hour at first, and later, if there is less discharge, every hour. 3. The saving of the sight depends entirely on the greatest care and attention to cleanliness. Small pieces of clean rag are better than a sponge, as each rag is to be used once only, and then burnt immediately ; sponges should never be used, except they are burnt after each washing. 4. A little washed lard should be smeared along the edges of the eyelids occasionally, to prevent them from sticking. Special warning :—Of all the mistaken practices which ignorance is apt to resort to, none is more ruinous than the use of poultices. Let them be dreaded and shunned as the destroyers of a new-born baby's sight. Tea-leaves and sugar of lead lotion are equally conducive to terrible mischief, stopping the way, as they do, to the only right and proper course to be taken.—(Issued by the Committee of the Manchester and Salford Sanitary Association.)

MENSTRUATION AFTER REMOVAL OF THE OVARIES.—In a paper read at the meeting of the American Gynæcological Society (Philadelphia Medical News, September 29), Dr. Campbell, of Augusta, asserted that menstruation often continued after removal of the ovaries, and attributed this to the fact that the function is influenced from the lower portion of the spinal cord. Dr. Goodell, of Philadelphia, speaking from his large experience, maintained that such menstruation is very rare, although in all his removals of the ovaries he had met with a spurious menstruation, appearing about five days after the operation, and which he attributed to the irritation of the nerves included in the ligatures. Two cases only of menstruation have occurred to him :—in one, the

bleeding was not in fact menstrual, but due to a sarcomatous tumour of the uterus. In the other, menstruation has continued regularly since the operation. This he considers may be due either to some abnormally placed ovarian tissue that had been left behind, or to sufficient time not having elapsed to break up the habit of menstruation. Dr. Emmett, of New York, referred to a case in which the patient, when last heard of, had menstruated thirteen times, the discharge, which, prior to the operation had been excessive, having become natural. Dr. Gaillard Thomas, of New York, said that he had removed both ovaries between fifty and sixty times, and he believes that the exceptional cases of apparent menstruation after the operation, are really examples of metrostaxis, the uterus, having been in the habit of menstruating, continuing awhile the function. The bleeding gradually diminishes, and finally disappears. There are numerous cases on record in which impregnation has followed upon removal of both ovaries, and he believes that these were dependent upon the presence of a third ovary. Dr. Byford, of Chicago, observed that the frequency of this occurrence depends much upon what is regarded as menstruation. If it occurs only when ovulation takes place, it is very rare, and can only be due to some of the ovarian structure being left behind. A mere discharge of blood may occur in many cases; and almost invariably, if the periods of recurrence be noted, it will be found that the discharge is a mere metrorrhagia and not menstruation.

HOW TO TAKE A PILL.—Dr. Samuel E. Wills, Earlville, Md., suggests the following method:—Having noticed that if a person at meals inclined the head backwards, as in laughing, while there was food in the mouth, they were pretty sure to be strangled from “the food going the wrong way,” I instructed those of my patients who had difficulty to swallow pills, to *keep* the head in the position they would if eating and swallowing food at the table—that is, the head inclined forward, the chin near the breast—and *keep* it in that position. If a small portion of saliva be on hand, or a small quantity of water taken after the pill is put in the mouth, it will surprise the patient and gratify the doctor to witness the facility with which it will be swallowed. To direct the patient to keep his eyes on his toes, I have found a help to keep the head in the proper position.—Med. and Sur. Reporter.

NEWMAN ON AN ABDOMINAL BELT FOR FLOATING KIDNEY.—The method of employing pressure, which Dr. Newman has found most useful, and most easily applied by the patient is, to have a well-fitting abdominal elastic bandage, extending from the line of Pourpart's ligament to the level of the sixth or seventh rib. The bandage should be made to fit the body accurately and firmly, but without exerting undue pressure at any part. It may be made in one piece, or of strips of elastic bandage sewn together, and united in the middle line in front by means of steel slips similar to those used to fix stays. The patient should have her bowels well opened every morning, and then before getting up for the day should slip over the lower extremities and upwards around the abdomen, a tight-fitting jersey, applying over the region of the kidney an air pad, and then buckling on it the broad elastic bandage. The air pad is made so that it may collapse while the patient is putting on the bandage, and afterwards, when this is adjusted, be inflated by means of a tube provided with a stop-cock. The pads are made by Mr. Hilliard, 65, Renfield Street, Glasgow.—*Glasgow Med. Journal.*

THE BACILLUS OF CHOLERA.—The last report of the German Cholera Commission under the direction of Dr. Koch confirms the former statement of the existence of a specific bacillus in the intestines. This organism dies very rapidly on drying, and appears to be readily killed by contact with normal gastric juice, hence the innocuousness of cholera dejections when swallowed by animals and even men in certain instances. These bacilli have been found in the water of tanks near local foci of the disease. Dr. Vincent Richards has asserted that he has succeeded in inducing cholera in pigs by making them swallow cholera dejections. This statement must for the present be received with reserve.

SULPHUROUS ACID IN THE TREATMENT OF LUPUS VULGARIS.—Dr. Herbert Collins recommends the local application of a mixture of anhydrous sulphurous acid and olive oil or glycerine (in the proportions of one part of the acid to three or more parts of the oil or glycerine) in the treatment of lupus vulgaris, and relates five cases in which good results were obtained. The method deserves a trial.—*Med. Times and Gazette.*

WINDLE ON THE FERRIC CHLORIDE REACTION.—Windle (Liverpool Med. Chir. Journal, Jan. 7, 1884) has examined 250 samples of urine, and has obtained the characteristic burgundy red colour, disappearing after heating, in pneumonia (2), chronic Bright's disease (2), and scarlet fever (2); in strangulated hernia (1) and perityphlitis (1); and in four cases of minor surgical operation. Once it was observed in the urine of a healthy person, but had disappeared next day and did not recur; it was rather persistent in the urine of an old woman with carcinoma of the rectum and liver; as well as in a case of empyema dressed antiseptically. It was present in the urine of five cases of diabetes, of these two died of coma on the same day. The ages of these cases are not stated; the two who died are described as "young," and one of the other cases is similarly described. He also refers to a green colouration given by this reagent when bile is present.

RECTAL ANÆSTHESIA.—The latest idea is to perform anæsthesia by pumping ether vapour into the rectum. This originated in France, but has been taken up in America. Its possibility is demonstrated, and in certain cases it might be very useful, but it must be much more difficult to watch the progress of the anæsthesia when administered in this way; in fact, in the cases mentioned the drug seemed to exert its influence very suddenly at last. The plan is not without obvious elements of danger, and is not likely to prove of more than exceptional utility.

ITCHING AS A SYMPTOM OF BRIGHT'S DISEASE.—From the Med. News, August 4, 1883, we take the following:—(1) During the course of Bright's disease, itching is experienced unconnected with any cutaneous eruption, and sometimes invading every portion of the integument. (2) This symptom may be described as occurring in three different forms—1st, as itching, properly so-called; 2nd, as horripilation; 3rd, as formication. (3) These sensations are a frequent accompaniment of Bright's disease; they are complained of at various periods; they may be felt both at the outset and during the course of the confirmed malady. (4) When met with at the commencement, they rank as an important symptom, and one of great semeiological value;

they coincide, at this period, with the pollakiuria, the cramps, the palpitations, the disorders of hearing, the epistaxis, etc., and may precede the appearance of œdema and albuminuria, thus serving, without any other aid, to place the physician on the right diagnostic track. (5) Coming on at a later period, they merely constitute an additional and conjoint symptom of the disease. (6) The pathology of this phenomenon is as yet based upon hypothesis. It represents a disorder of the sensory sphere, due, probably, to the irritation produced at the terminal extremities of the nerves by refuse material retained in the blood through failure in the eliminative functions of the kidneys.—*Jour. of Cutan. and Vener. Diseases*, July, 1883.—*Quart. Comp. Med. Sci.*

YVER ON UNILATERAL RETINITIS ALBUMINURIA IN A PATIENT WITH ONLY ONE KIDNEY.—Yver (*Recueil d'Ophthalmologie*, March, 1883) has recorded a case of well marked parenchymatous nephritis with retinitis affecting the left eye to such a degree that vision was ultimately almost lost. The right eye remained normal throughout. At the autopsy the left kidney presented the usual characters of the large white kidney, but the right kidney was entirely absent, no trace of artery, vein, or ureter being discoverable.

NEW INVENTIONS, DRUGS, &c.

MALTO-PEPSYN.—Malto-pepsyn is a preparation which comes to us from Canada with strong recommendations from the profession in that colony. It is a combination of pepsine, pancreatine, and dried malt extract, so that it contains the whole of the animal and vegetable proteolytic and amylolytic ferments. While it may be doubted whether the success of such combinations possesses a scientific *raison d'être*, it must be allowed that their therapeutical value after all depends upon clinical experience, and so far this is in their favour. Malto-pepsyn is palatable, moderate in price, and suitable to a very wide range of pathological conditions in which practitioners find useful aid from pharmaceutical novelties.

MAPPIN'S STANDARD LARYNGOSCOPIC LAMP.—This lamp has been invented as a useful and convenient substitute for the gas lamp so generally used for the examination of the eye, throat, etc. The advantages of it are, small cost and portability, combined with excellent illuminating power. For country practitioners, where gas is not to be obtained, the lamp is most suitable, while many will be found to prefer it to gas even where this is procurable. The light is cool, of good volume and brilliancy, and steady. For ophthalmoscopic purposes a plain chimney instead of the bull's-eye can be supplied.

Miscellany.

A NEW MEDICAL DIVINITY.—The Boston Medical and Surgical Journal says, the title of "Medical Venus," which was applied to the Venus de Medici by some individual in Anthony Trollope's autobiography, suggests for our sisters in the profession a new tutelar divinity possessing certain advantages over the god who for so many centuries has stood as the poetic representative of the healing art. Now the unfortunate limitations in the symbolism of Apollo may be remedied by a transfer of worship on the part of the female practitioners to the Medical Venus.

Alphonse Karr was lately a guest at a dinner of some homœopathic physicians at Paris, when, after toasts had been honored to Hahnemann and to the great lights of the science now living, he was asked to propose a toast. "Gentlemen," he said, "you have drunk the health of many physicians, but there is one toast you have forgotten. Permit me to repair the omission. I drink to the health of your patients."

New Books, &c., Received.

The Duration of the Latent Period, the Fever, and the Infectiveness of the Exanthemata. By FRANCIS VACHER, Medical Officer of Health for Birkenhead. London: John Heywood.—The Extra Pharmacopœia of Unofficial Drugs. By W. MARTINDALE, F.C.S., and W. WYNN WESTCOTT, M.B. Lond. Third Edition. London: H. K. Lewis. 1884.—Syphilis and Pseudo-Syphilis. By ALFRED COOPER, F.R.C.S. London: J. and A. Churchill. 1884.—Address on Practical Medicine. By JOHN V. SHOEMAKER. Philadelphia, 1884.—Hay Fever; its Etiology and Treatment. By MORELL MACKENZIE. London: J. and A. Churchill. 1884.—Discussion on Albuminuria. Glasgow Pathological and Clinical Society. Glasgow: Alex Macdougall. 1884.—The Treatment of Backward Displacements of the Uterus and of Prolapsus Uteri. By WILLIAM ALEXANDER, M.D., M.Ch., F.R.C.S. Eng. London: J. and A. Churchill. 1883.—Manual of Pathological Histology. By CORNIL and RANVIER. Vol. II., part I. Translated by A. M. HART. London: Smith, Elder and Co. 1884.—Clinical Demonstrations of Ophthalmic Subjects. By J. R. WOLFE, M.D., F.R.C.S.E. London: J. and A. Churchill. 1884.—Report on the Health of the Borough of Scarborough for the year 1883. By Dr. J. W. TAYLOR. Scarborough: John Haygard.—Scarborough as a Health Resort. By ALFRED HAVILAND, M.R.C.P.E. London: Hamilton and Adams. 1883.—The Visceral Neuroses. Being the Gulstonian Lectures for 1884. By T. CLIFFORD ALLBUTT, M.A., M.D., F.R.S. London: J. and A. Churchill. 1884.

THE
BIRMINGHAM MEDICAL REVIEW.

AUGUST, 1884.

ORIGINAL COMMUNICATIONS.

AN ADDRESS ON
SANITATION IN SOME OF ITS ASPECTS,
MORAL AS WELL AS GENERAL.

DELIVERED AT THE ANNUAL MEETING OF THE BIRMINGHAM AND
MIDLAND COUNTIES BRANCH OF THE BRITISH MEDICAL ASSOCIATION,

BY JOHN J. NASON, M.B., J.P., PRESIDENT.

GENTLEMEN,

It falls to my lot, in assuming to-day the presidential chair of this important branch of the "British Medical Association," to have to address you on some topic of interest to the members of our profession; but before proceeding to give you the few thoughts and suggestions which have occurred to me as being appropriate to the present occasion, I must tender to you my sincere thanks for the honour you have conferred upon me in placing me in so high a position. When I think of the many able and distinguished men who belong to this branch—men who by their learning, experience, and originality of practice, as well as research, are capable of filling the office of president with a degree of credit to the Association, and of satisfaction to its members, which I cannot pretend to aspire to, I am not a little disturbed at my

own rashness in accepting so responsible a post ; and in this feeling I am the more confirmed by the fact that I have the disadvantage to follow one who holds so high and distinguished a position in his profession, and who has filled this chair with such ability, tact, and judgment, as our late president, Dr. Foster. I cannot pretend to do for you what he and other distinguished presidents in the past have done ; but I would assure you that it will always be my earnest endeavour to discharge the duties of my office with due regard to its dignity and efficiency : and I trust that in this endeavour I shall receive not only your generous sympathy, but also that measure of support and of forbearance for my shortcomings which is due to the man who makes no pretensions to superior wisdom or knowledge, but merely aims at doing his duty to the best of the ability with which God has endowed him.

It is, I believe, the more usual course in presidential addresses to review past work, or such as is in process of being done in one or more of the branches of our profession, or by the profession taken as a whole, during a given period. I purpose making my remarks more general ; and, after a short review of some of our more recent achievements, I shall proceed to the great and important question of Sanitation, which I shall consider from a moral as well as an ordinary point of view.

The strides made by our profession, and indeed by all branches of science, during the last few years, have been so varied and extensive, so far-stretching and all embracing that we may note with grateful sense and wondering awe, the slow but sure and certain work of evolution which throughout all ages has been going on, and which even now, as time rolls on, is steadily advancing, and which bears upon its every line, and has stamped upon its every feature, the one and never-fading mark of a " First Great Cause."

Some of you, gentlemen, have contributed to this great progress; some of you are even now engaged in adding no inconsiderable portion to that solid increment of joint action which helps to rear those separate structures which, when bound together by the many connecting links which hold them in one firm embrace, may be summed up as the "totality" of medical science.

Thanks to the great advance of knowledge—especially of physiology and pathology—and to the more careful and painstaking study of the diseases to which each organ of the body is liable, and to the more accurate record of cases, our present acquaintance with disease is placed on a sounder basis than it was, and is followed—as a matter of course—by a more scientific and satisfactory treatment.

The mention of treatment cannot be made without an acknowledgment of our better acquaintance with the properties and actions of drugs, and of our indebtedness to the introduction of new remedies—not to speak of their more exact and careful preparation, pharmaceutical and chemical—and of various elegant preparations which are intended to aid and supplement the different nutritive processes which, in so many cases, are found deficient.

It may be claimed for medicine and surgery alike—whether viewed in their scientific or practical aspects—that they have made a greater advance during the last twenty-five years than during any similar previous period, and have done more in that time to make good their title to be ranked amongst the leading sciences than they ever did before.

Let us look for a moment at the subject of contagia. What a vast mine of wealth has been discovered here, and what a yield of most valuable results is promised to us in the future! Enough has already been unfolded to our senses to demonstrate that some at least of these contagia

are organic bodies, and under various names, as bacilli, bacteriae, micrococci, vibrios, etc., become most important and significant factors in the production of specific diseases, and of certain departures—more or less grave and serious—from the normal condition of the body; or, it may be, they induce the changes that, every moment of time, are going on in and around us—changes, for instance, such as those involved in what we designate as putrefaction, and which are due to the operation of these microscopic organisms. This, and the further discovery that if the normal textures and fluids of the body be kept free from these organisms, decomposition is prevented, is a gain of enormous value.

I cannot pass from this subject without some brief allusion to the incalculable benefits conferred upon mankind—benefits extended also to part of the brute creation—by the discovery and application of antiseptics. Who can measure the part they have already played in the prevention of infection and contagion; and the yet more important part they are destined to play in the future? What does not the healthiness and cleanliness of our hospitals, of our sick chambers, of our own dwellings also—what does not operative surgery, the treatment of wounds—whether recent or old, whether healthy or foul and ulcerating—owe to antiseptics? It is not too much to say that where the antiseptic principle is strictly carried out in the wards of our hospitals, there erysipelas, hospital gangrene, and pyæmia, are now of rare occurrence. There are many amongst us who must recollect the pain and scandal that was caused some fifteen years ago by the accounts published of the pestilential condition of the Glasgow Royal Infirmary. It was in connection with this that Professor Lister so convincingly demonstrated the beneficial action of antiseptics.

The system known as "Listerism" has, I am aware, its unbelievers as well as its believers, its active opponents as well as its ardent supporters, and I am not now going to run into argument about it ; but I make bold to state that it was the faith, the well-nigh unbounded faith, men put in it, that led some of them to dare to do with the abdomen and its contents—not to mention the bones and joints—what, but a little time back, would have been regarded as altogether unjustifiable—not to say criminal.

The discovery of antiseptics led the way to those marvellous operations on the parts already referred to, which are the wonder of the present age, and which alone are sufficient to characterise it as one of unexampled progress in the science and art of surgery.

Absolute cleanliness, and scrupulous attention to every detail in connection with the operating room, the operator, the person operated upon, the nurses, and all and everything used in and for the operation, will do much to render "Listerism"—so-called—unnecessary ; but even this may be said to be, more or less, the outcome of "Listerism," and if this had been all that it had done for us, our indebtedness would have been great. But we may justly claim for it something more—we may claim that it has contributed to the advance of surgery as much, in its way, as did Anæsthetics, of which Chloroform may be taken as the type. What a blessing these latter have been, not only to humanity, but also to the brute creation, in the alleviation of pain and suffering, and what incalculable aid and assistance they have given to the surgeon, are too well known and too highly appreciated to need any eulogium from me. Their use has enabled the operator not only to extend his work, but also to perform it with that careful and pains-taking deliberation which is so essential to thoroughness and a good and successful result.

In speaking of the antiseptic treatment, I have already casually alluded to the advance made of late years in the surgery of the abdomen, and of the bones and joints.

Two members in particular of this branch occupy a very prominent position, and deservedly so, in respect to the extent and success of their practice in the treatment of intra-peritoneal tumours, and of various diseased abdominal organs. It has been the wont of these gentlemen annually to bring before this branch at one of its ordinary monthly meetings, and through it, to the whole profession, a full detailed account of their work.

Both those who have had the privilege of hearing these statements read, and those who have become acquainted with them through the medical journals, cannot fail to have been deeply impressed with the daring and skill of the operators, and with the astonishing success they have met with.

To some people the accounts of these operations partake so of the marvellous that they are to some extent unwilling—perhaps it would be more correct to say unable—to comprehend them ; and, consequently, they may be thought to be somewhat incredulous. This may, in great part, be accounted for by the difficulty many of us experience in shaking ourselves free from the fetters with which we have been bound by our early training.

The time is not very remote when it was universally taught that to open a joint, or even to wound the peritoneum, was, in either case, fraught with the greatest danger to life. And now what do we either calmly and deliberately do, or else stand by and see done, not only with the joints and bones, and the extensive serous membrane just named, but also with many of the important organs which are covered and protected by this very membrane? We behold operations of the greatest

magnitude performed with an amount of success which both gratifies and astonishes us.

I freely confess that I was, at one time, to be ranked amongst the incredulous ones; but I have long since ceased to doubt what I have been privileged to see. I now welcome these modern achievements as brilliant examples of the advance of surgical skill; but, at the same time, I do entertain a very strong desire to know more of the after-history of such cases than we have as yet been furnished with; and I trust I shall not be misunderstood in giving expression to this desire.

When I listened with pleasurable wonder to the reading by Mr. Tait of his last paper, which contained an account of 222 cases operated upon by him during the previous year, with only sixteen deaths, and also the paper read by Dr. Savage, containing a history of eighty-five cases operated upon by him the previous year, with only four deaths, the thought arose in my mind that the profession at large would be in a far better position to form an estimate of the value of these wonderful operations, and better able to recommend their patients whether to submit to operative treatment or not, if the history of such cases could be carried on for a year at least, or for a longer period if possible. I would venture, therefore, on this occasion, and from this chair, to submit to the two gentlemen I have named, and to all others who may have specially taken up the subject of abdominal surgery, whether, in the interests of science, and with a view to a more general feeling of confidence in these novel operations, they could not follow up their cases, and, as year by year they enlighten and edify us with the graphic accounts of their new and latest work, post us up, so to speak, in the continued history of those cases that have gone before, and have been reported in previous years.

This would afford us the truest and best means of gauging the utility of the different operations ; and utility in these, as in other operations, should have something to do with our estimate of their intrinsic merit. To arrive at a true, definite, and well-digested opinion we want to have demonstrated to us the *ultimate advantage*.

The labour required to carry this out would not be great ; while the benefits accruing from it would be immense.*

Be this as it may, we cannot be insensible to the great gain that has been added to the beneficent work of surgery by the extraordinary achievements of Sir Spencer Wells, Keith, Tait, Savage, and many others ; and the profession and mankind at large owe them a deep debt of gratitude.

Passing on now to the great and important subject of Sanitation, I have no need to demonstrate the bearing which this has on the preservation of health ; for, on that point, there can be no difference of opinion amongst us. I would merely enunciate some of the great truths which constitute its foundation, and endeavour to bring home to us, in as practical a manner as I can, the grave responsibility which devolves upon us, as conservators of the public health, of doing the utmost we can, in the various localities in which we are placed, to claim for these truths a public recognition, and to see that they are put into practical operation.

Sanitation (to be worthy of the name) must not seek its sphere of action amongst the abnormities of life only, but must demand that human life itself shall be lived, as far as possible, under such conditions as will give room for its development in a healthy and vigorous state.

And this leads me to speak of the various points on which we should bring our sanitary principles to bear. And first, of the Home, the "Sanitary Unit." "*Sanitas*

* Since the delivery of the above I have been informed by Mr. Tait that he read a Paper on the secondary results of his cases before the Harveian Society, in March last, which was published in the Medical Press and Circular for the same month.

sanitatum, omnia, sanitas." These words were spoken on a certain memorable occasion by a great and wise man, a statesman, one who served well his generation, whose name and fame will stand out bright and ever brighter as the years roll by, and the prejudices and wrongs, which, for a season, somewhat obscured them, shall have been swept away by the breath of a freer, a healthier, a wiser, and a happier people. On the occasion of the opening of the new buildings of the "Victoria Dwellings Association" in 1877, the late Lord Beaconsfield is reported to have said as follows:—"I have touched upon the health of the people, and I know there are many who look upon that as an amiable, but merely philanthropic subject to dwell upon; but the truth is, that the question is much deeper than it appears upon the surface. The health of the people is really the foundation upon which all their happiness and all their power as a State depend. It is quite possible for a kingdom to be inhabited by an able and active population; you may have skilful manufacturers, and you may have a productive agriculture; the arts may flourish, architecture may cover your lands with temples and palaces; you may have even material power to defend and support all these acquisitions; you may have arms of precision and fleets of fish torpedoes; but if the population of that country is stationary or yearly diminishes, if, while it diminishes in numbers, it diminishes also in stature and strength, that country is ultimately doomed. And, speaking to those who, I hope, are not ashamed to say that they are proud of the Empire to which they belong, and which their ancestors created, I recommend to them, by all the means in their power, to assist the movement that is now prevalent in the country for improving the condition of the people by ameliorating the dwellings in which they live. The health of the people is, in my opinion therefore, the first duty of a statesman."

I take it for granted that none of us is prepared to gainsay the truth of these weighty sentiments ; and I trust that few of us will fail to realise what an important lesson they convey, and what a further responsibility they throw upon us.

The Home stands on the very threshold of the subject of sanitation. To render the dwelling of man fit for habitation is to lay the foundation stone—so to speak—of that edifice of health, which, to a people and a nation, is one of the chief sources of its wealth, happiness, and prosperity.

We are beginning to realise more fully the fact that property, especially cottage property, has its responsibilities as well as its privileges. In the not remote past, attempts have been made, both inside and outside Parliament, to improve the dwellings of the people, especially the poor ; and, thank God, the subject is at the present time engaging the serious attention of the various authorities, and that in such a manner as is likely to be productive of good results.

There is now sitting a Royal Commission, composed of men who are eminent for their liberality of thought, their largeness of heart, and their practical ability, and whose views with regard to religious, social, and political matters, are varied, to take evidence on the subject ; and one is thankful to hear that the operations of this Commission are to be extended to Scotland and Ireland. Their report will be anxiously awaited ; and, when presented, it will be the duty of the Government to supplement it by wise and efficient legislation.

In the meantime we need not, we must not, be still, and wait on expectancy.

The position which we occupy, in relation to all classes, gives us the most commanding influence in regard to all

questions which concern the public health ; and if we do but realise that the highest and noblest part of our mission is to point the way to "glorious life," and not merely to block the road to "dusty death," our aim will be in accordance with it, and we shall not rest satisfied with anything short of a sanitary home, however humble it may be. Further legislation is needed, but it must be better adapted to the circumstances of the case, and more in accordance with sanitary requirements.

A return of twenty, fifteen, or even ten per cent. on investments in cottage property surely means a bad, insanitary dwelling, and is an iniquity which ought to have been swept away long ago.

Local authorities, both rural and urban, should have entrusted to them, and be held responsible for, the sanitary condition of all dwellings ; and efficient measures should be provided (by Government Inspectors would answer best) whereby the central authority may be assured that the work entrusted to the local authorities is effectually done.

They should have power given them to pull down all old and irremediably bad houses, and in the case of cottages to erect new ones, provided that the want of such cottages, after due and proper enquiry, is certified to exist. The power to prevent overcrowding requires to be extended, and to be exercised with greater efficiency ; for the evil resulting from this state of things is incalculable.

Medical officers of health should have enlarged areas allotted to them ; they should be debarred from private practice ; and their remuneration should be in accordance with these conditions. The sub-officers—the inspectors of nuisances—should be better qualified for the duties they have to perform, by a technical, as well as a fair general education.

Medical men should look upon it as not only their duty, but their privilege also, to assist the officers of health in the discharge of their duties, and to work in harmony with the authorities in this, and in all other matters affecting the welfare of the people.

Next in importance to the dwelling, comes the water supply, which should be pure and as free from hardness as circumstances will permit. Local authorities should be compelled to provide good water for the people, which the people should be required to use; and the greatest care should be taken to keep the tanks and vessels used in the storing of the water free from pollution. Surface water, as collected in ordinary wells, is, according to experience, as frequently contaminated in villages and isolated dwellings, as in towns; and this mode of supply should be done away with in all cases where practicable.

The same principles apply to the food of the people, which, in importance, stands next to that of the dwelling and the water. Special regard should be had to the supply of wholesome animal food, and to increase the supply of pure good milk. Strange to say, the urban population is, as a rule, better off in this latter respect than the rural. In many of the villages it is next to impossible for the poor to obtain milk at any price; the pigs have the preference given them, and fatten upon that which should, in part, go to the sustenance of human life. How much this condition of things hinders the growth and development of healthy young life; what a loss it denotes in the ways and means of repairing the daily waste of active labour-life, and of maintaining the nutrition of waning existence, country practitioners can, with sorrow and regret testify to. I commend this important subject to the serious and earnest consideration of clergymen, landlords, and farmers.

The adulteration of milk and of all foods should command more attention than it now receives, and the laws relating to it should be more strictly and fearlessly enforced. In many places they are, by tacit consent, allowed to be in complete abeyance. These laws I should wish to see extended to the adulteration of drugs, and of wines, and also of beer, the most largely consumed beverage in the British Isles. In the case of beer, this has become more particularly needed since the repeal of the malt duty, which allows grain, other than barley, to be malted and used in the manufacture of it. The public should have some competent authoritative assurance given them as to what are the constituents of their national drink—first, when it leaves the manufactory, and secondly, when it is delivered to the consumer.

The clothing and body cleanliness of the people next demand our consideration. In regard to the former, we should unsparingly denounce such absurd things as the high-heeled and pointed-toed boots, the tightly-laced corset, and the garter ; and we should not rest content with denunciations only, but we should persist in an agitation until such barbarous customs and fashions cease to maim and disfigure the body. In regard to the latter, we should advocate the teaching of swimming to females as well as males, and we should work for and encourage the erection of public baths, especially in all centres of population.

The Compulsory Education Act has already done much to improve the condition of the masses ; and in time it must do more, and also have a marked effect in teaching the more important principles of sanitation, and the advantages to be derived, individually and collectively, by putting in practice these principles. But there are dangers attendant upon the system as at present carried out, and means should be devised whereby these evils may,

as far as possible, be minimised, if not prevented. The congregating together of large numbers of children from the age of four years to twelve years and upwards, is fruitful in its work of propagating infectious and contagious diseases ; while the indiscriminate carrying out of the Act, the treating the children too much all alike, without proper classification according to ability, temperament, and mental and physical capacity, and without sufficient regard to their future calling in life ; and the undue and unnatural brain forcing that the Code brings about,—and this, alas ! too often in the case of badly fed, badly nourished, and poorly clad children—are calculated to induce mischievous results. The subject is beset with difficulties, and I have no clear conviction as to how these difficulties are to be met ; but I would suggest the appointment of efficient medical inspectors in all towns of more than a certain population, and the compulsory introduction of physical training, such as gymnastics, drilling, and the like.

I have endeavoured, thus far, to delineate some of the main features of general sanitation ; but the subject, as I wish to present it to you, would be altogether incomplete if I did not proceed to apply it to the moral habits of the community, as well as to what I may call the accidents of their earthly life.

Brought face to face as we all are with the dire evils which arise out of vicious and immoral habits ; called upon to spend many an anxious hour in a comparatively hopeless struggle with diseases which are the direct outcome of intemperance or want of chastity ; consulted, as we continually are, about ailments which form the bitter legacy of a perverted life, I have no need to do more than point out that if we would all unite in an earnest effort to build up the public health, we must first of all strike at the root

of those evil habits which are the prolific cause of so much sickness and disease, and do the utmost we can to inculcate and encourage a healthier moral tone than that which now prevails in the community at large. And here I would not be misunderstood. I have no wish to invite my medical brethren to travel out of their legitimate provinces, and to usurp the duties of the parent, the teacher, or the minister of religion. What I mean is this—that we medical men occupy an altogether exceptional position in regard to this grave question of public morality; and that this very position gives us exceptional powers and opportunities of influencing the habits and lives of others; and that, consequently, if we resolve to unite in using these powers and opportunities rightly, and with a wise and thoughtful discretion, we cannot fail to raise the moral tone, and thus to improve the public health. And this ought to be our high aim—our lofty ideal—if we would regard ourselves as conservators of the health of the people, as well as practitioners in the art of healing.

“Prevention is better than cure;” and no sordid motives, no considerations of personal interest or worldly advantage, still less of callous indifference, should be allowed to restrain us from an united and determined effort to inculcate such principles, and to disseminate such useful physiological information, as will tend to aid our fellow-creatures (and especially the young) in their struggles with temptation; and to ensure for the rising generation as great an immunity from sickness and disease as we possibly can.

The two prominent vices of the present day, to which I now purpose making more direct allusion, are those of drunkenness and immorality—in regard to both of which our position is one of great responsibility. In these, as in all other matters affecting the public health, we should

have clear convictions, grounded on undeniable principles of abstract truth; and in order that we may at all times stand firm to our principles, and not pander to the follies of a luxurious and indulgent age, we should cultivate and encourage amongst ourselves, not only purity of thought, word, and deed, but also that fearless moral courage which is required to enable us, when called upon, to speak the truth with no uncertain sound. "*Magna est veritas, et prævalebit.*" It is possible that in so doing we may run the risk of giving offence to some whom we seek to benefit; but if our utterances and our bearing are marked by that courtesy and gentleness, and consideration for the feelings of others, which befit cultivated English gentlemen, we have, in the long run, little to fear, and, on the contrary, everything to gain.

We cannot shut our eyes to the fact that drunkenness and impurity are sapping the very life of the nation, and that they go to swell the torrent of poverty, misery, and crime, in whose dark seething waters multitudes of our fellow-beings, through their instrumentality, are, day by day, being ingulphed; and if we, as a profession, can do anything (as I believe and maintain we can) to stem this torrent, and so to save the national health from destruction, we shall earn the admiration, as well as the gratitude, of a temperate, sober, chaste, and enlightened people.

Let us ask ourselves what our past conduct has been in regard to alcohol. How long is it since we were crazy on the treatment of acute diseases by the administration of doses which were positively poisonous? How long is it since so-called fashionable doctors recommended their patients—female as well as male—to take light wines freely—even for breakfast—and encouraged, or at least permitted, the employment of "pick-me-ups" to enable fashionable people to keep up a system of late hours and

worldly excitement, which was destructive alike to mind and body? how often have careless and ignorant medical men ordered alcohol in the most reckless manner, omitting to prescribe the dose, or the frequency of its repetition; thus, in many cases, leaving the nurse, or the friend, or the patient to determine the times of taking, and the amount taken? No wonder, under such circumstances, that the results have too often been injurious, and even disastrous. Thank God! reason, common sense, and greater scientific knowledge, are beginning to exert their true influence; and the courage which is begot of this triumvirate enables us to take our proper stand, and places us in a far better position than we formerly occupied to grapple with the diseases, the weaknesses, and the morbid cravings of our patients, and to avoid, in the act of administering relief, the danger of either starting or encouraging habits which too often lead on to self-indulgence or excess, and end in moral and physical degradation.

Now, with regard to alcohol—at the risk of being dogmatic, we must, I think, be positive and explicit. First, I assume that we are all of one mind that alcohol in itself is a good thing, given to us by a beneficent Creator, for purposes of enjoyment and health. Consequently—great and almost universal as its abuse has been—we can never give in our adhesion to the doctrine of certain sections of the temperance party, that it has not its proper and legitimate use, both in the treatment of disease, and as a beverage.

In regard to the latter, I make bold to say that the following principles should form the staple of our teaching.

The use of alcohol in a normal condition of health is a luxury, cheering, indeed, to the heart of man, but not in any way essential to his physical well-being. This use should be protected and guarded by the strictest

habits of moderation or true temperance, which is not total abstinence, but self-control (*ἐγκρατεία*), and which is thus defined by Aristotle, who, speaking of the temperate man—the *ἐγκρατὴς*—says : “ The man of self-control is the same as the man who is apt to abide by his resolution.” And again : “ The man of self-control, knowing his desires to be wrong, refuses to follow them.”*

As a rule, children should be brought up without alcohol in any form. Adults, with good digestive powers, and average health, and whose daily waste is not in excess of the daily supply and repair, are just as well, and perhaps even better, without it ; but, when taken, it should be with meals, and that in a dilute form, and not more than twice a day. It should never be taken between meals, except to serve some special and temporary purpose.

As regards the habitual drunkard, or one who stops something short of this, but is more or less a persistent abuser of drink, with him we cannot be too positive or unrelenting ; no half measures will meet his case ; total abstinence is his only remedy—a remedy which must be continued, if not for the rest of his life, at least for such a period of time as is necessary for the complete restoration of his moral strength and power of will. For the so-called dipsomaniac, I should wish to see legal power given to relatives or friends to confine such in licensed “ retreats ;” safeguarding their liberties in every conceivable manner, so as to avoid wrong and abuse.

This should constitute the principle of our teaching in regard to the temperance question ; and the results of such teaching, honestly, fairly, and judiciously enforced, will, I believe, be far greater and better, and more enduring, than those which so many good and excellent people are impetuously, if not petulantly and intemperately, trying

* Aristotle : Nic. Eth : vij, 1.

to bring about by wholesale but one-sided repressive legislation.

The ultimate good of any remedial measures which are or may be employed for the cure of drunkenness, depend entirely upon the soundness of the principles upon which they are based ; and if we are careful to grasp right principles before we proceed to lay down rules of conduct, we cannot fail to inculcate doctrines which will tend to the moral and physical well-being of the human race.

Leaving now the great foe to health which we have to contend with in drunkenness, I pass on to speak of immorality.

And here I agree with a certain popular preacher, who said that to speak of drunkenness as the national vice was to display a lamentable ignorance of the extent to which immorality prevails : for it is immorality which is sapping the life of the nation in a way and to an extent which drunkenness, with all its horrors, is incapable of doing. Immorality is not only widely prevalent amongst all classes, but is rapidly spreading. Statistics show that the number of fallen women is on the increase, whilst the age at which girls enter upon their career of prostitution is steadily falling, till it would seem to have reached the lowest possible limit ; and well-authenticated cases reach us of actual children being eligible for Magdalen Asylums.

Now, gentlemen, a very serious responsibility rests upon us in regard to this matter ; and surely the interests of our common humanity, not to mention higher and more stringent obligations, appeal to us in tones of earnest entreaty to do what we can in our professional capacity, not only to prevent the physical deterioration of man, but also to save the blood of the nation from being impoverished and contaminated by indulgences which are fraught with such infinite peril, both to the minds and

bodies of those who are directly concerned as chief actors, and also to their children, and children's children, even to the third and fourth generation.

And in asking you to realise this responsibility, and to discharge it with that nobility of spirit and willing self-sacrifice which is at all times wont to animate the members of our profession in everything that concerns the amelioration of human suffering, I feel that I am asking you to do what strictly belongs to our own province. For we medical men occupy a position which enables us to speak with a knowledge and authority which is not ordinarily shared by other men; nay, more, we can give practical counsel to others in their physical struggles and temptations, which will be of inestimable benefit and help to them in resisting baneful and pernicious habits, which are bound to impair, in a greater or less degree, the natural health of the body. And not only so, but the opportunities which are afforded us of speaking on these delicate questions are far more numerous than those which fall to the lot of most men, not excepting even ministers of religion; for in what has been well termed the "Confessional of the Consulting Room" we are perpetually being brought face to face with the victims of this vice, in all its stages, who in order to get our medical aid, are compelled to acknowledge their wrong-doings; and I maintain that all such persons ought to receive at our hands, in addition to ordinary medical treatment, some definite principles of morality and self-knowledge, which will, on the one hand, make it impossible for them ever again to be guilty of sins of ignorance, and, on the other hand, will serve as a strong inducement to avoid those of folly.

But, gentlemen, if we would deal effectually with this great evil, it is of the utmost importance that we should be agreed amongst ourselves as to the principles of this

portion of our sanitary code. And what these should be I have no hesitation in summing up as follows :*

(1.) We can give no countenance whatever to those who deliberately encourage the early indulgence of the passions, on the false, wicked, and untenable grounds that self-restraint is incompatible with health ; and that sexual intercourse is a necessity which must be had recourse to, at all hazards, for the full development of the body.

(2.) We must strongly urge that in order to secure vigour and healthy development in early youth, the reproductive organs must be kept in a state of absolute quiescence ; and, that under no conceivable circumstances, can we regard illicit intercourse at a later period of life as anything less than an unmitigated evil.

(3.) And while for the young and unmarried we thus lay down the rule of continence, absolute and entire, we must go a step further, and endeavour to meet the ignorance which exists amongst married people by pointing out, as opportunities shall occur, that the marriage state does not absolve men from the rule of moderation, and that every infringement of this law is a danger to health which they will do well to avoid.

Now, in our efforts to inculcate and establish these sanitary moral principles, the young demand our first consideration ; for not only are they very prone to fall into habits which weaken and undermine the constitution—habits from which they might be protected by wise guardianship and care, but the preservation in them of a pure mind and clear conscience will tend to create an instinctive horror of those vicious habits in after life which destroy the nobility of manhood, and contaminate the human race with a filthy and corrupting disease.

And here, gentlemen, if you will bear with me, I would

* *Vide* Acton on the Reproductive Organs.

venture to say that I question if we medical men are as alive to our responsibilities, and as eager to avail ourselves of our opportunities, as we ought to be.

The young, for the most part, sin in ignorance; and instead of this ignorance being enlightened, they are too often left to wallow, as it were, unaided, unchecked, in their ignorant fleshly doings, until consequences of so serious a kind have arisen that the calling in of medical advice has become imperative.

How much better would it be if we could step in at an earlier period, and save the unconscious victims from falling into the pit they had, for the most part, made for themselves.

Now, to do this, we have need to cultivate in ourselves, and to encourage in parents and teachers, an enlarged sympathy, and a spirit of active vigilance.

The practised eye of the medical man can quickly detect in his young patient the first beginnings of fleshly evil, and he can thus put the parent or teacher on his guard, and advise him how to act.

More especially is this needed in our schools, and perhaps more so in the private than in the public schools; for it is thought that the evil runs riot to a far greater extent in the former than in the latter.

(To be continued.)

A RARE FORM OF LARYNGEAL NEUROSIS.

BY J. RUSSELL, M.D., F.R.C.P.

PHYSICIAN TO THE BIRMINGHAM GENERAL HOSPITAL.

IN no particular has modern clinical research been more practical in its direction than in taking advantage of the investigations which have been conducted of late years into the minute anatomy of different organs, especially of nerves and blood vessels, and particularly into their anatomical arrangement with reference to their physiological uses. I may instance the elucidation of the varieties presented by different cases of muscular atrophy by referring these varieties to the physiological grouping of the motor cells in the anterior horns of the spinal gray matter. Again, the operation of the various co-ordinating centres in the brain and spinal cord have thrown important light upon numerous phenomena, both natural and morbid, as *e.g.*, the centres in the neighbourhood of the Aqueduct of Sylvius, in their influence upon the condition of the pupil, and upon the co-ordinated movements of the eye ball, both in health and disease. The important class of vertiginous affections affords another and a very frequent illustration, and with this group the case which forms the foundation of the present paper has alliance.

By analysing and explaining the phenomena of vertigo clinical observers have been enabled to separate the class of vertiginous attacks from the large and very heterogeneous group of sudden attacks, which popularly go by

the name of "fits," and are a cause of reasonable alarm to the sufferers. They have thus done much to take away the fear of epilepsy or paralysis, which the symptoms at first suggested ; and they have often eased the mind of the medical attendant himself, by referring the origin of the attack to centres of lower vital importance than those which, at first sight, appeared to be involved.

No class of cases can better exemplify the wide relations which may be held by certain important centres with peripheral nerves ; the various modes in which the same centre may be acted upon from different quarters either by the nerves directly, or through the influence of nerves upon blood vessels ; and also the great importance as regards treatment of ascertaining from what quarter the influence is derived, and by what channel it is conducted. A whole chapter in physiology is illustrated by the correlation of the auditory and visual centres with the centre governing the equilibrium of the body, and by the manner in which independent organs of primary importance become implicated in attacks of vertigo, through the agency of certain branches of the sympathetic, of the fifth, and of the vagus, and of the connection between the nuclei of these nerves with the auditory nucleus in the medulla oblongata, as described by the late Lockhart Clarke.

One illustration of these relations and of their effects is afforded by the association of the vagus nerve with certain forms of vertigo, either through its peripheral ramifications in the ear, or through its relations in the medulla oblongata ; the state of unconsciousness which forms a very prominent symptom in certain attacks of vertigo, and constitutes the feature which principally suggests the fear of epilepsy, is thus satisfactorily accounted for through the power of inhibition exerted by

that nerve over the heart.* With so wide a basis on which to found an explanation of widely differing symptoms, it is hardly surprising if the group of vertigo be sometimes enlarged beyond its legitimate bounds.

The rather wide application which is made of the term "giddiness" or "vertigo" to include instances of mere unsteadiness or tendency to syncope, adds to the occasion of error, and indeed it may not always be easy to separate the two conditions. An interesting illustration is afforded by the paper to which I am about to refer. It was read

* The state of consciousness, its presence or absence, constitutes a very remarkable feature in all forms of sudden attacks connected with the nervous or vascular system. In epilepsy, *e. g.*, it has peculiar interest; unconsciousness in this disease has formed the subject of numerous observations by Dr. Hughlings Jackson; its presence or absence often indicates the starting point (of the fit at least) so far as the highest centres are concerned. The remarkably brief period during which consciousness may be suspended in the *petit mal* forms one of the most interesting features in relation to this function, and proclaims the difficulty of explaining the mechanism by which it is suspended. "Any small lesion of the brain, in almost any part, will cause transient loss of consciousness under certain conditions" (Gowers). In other forms of "fits," in vertigo especially, the presence or absence of consciousness is a very uncertain element in attacks apparently of the same kind. So it is in the cases which form the special subject of this communication. The vascular supply to the brain, and its regulation by vaso motor nerves, at one time regarded a prominent element in the explanation of the state of unconsciousness, has now assumed a much lower place in the discussion. Priestley Smith's paper on Reflex Amblyopia (*Ophthalmic Review*, June, 1884) may, perhaps, suggest means of accounting for the "insensibility" of hysteria. But another element of primary importance in its influence on the condition of consciousness is the state of cardiac action, especially in relation to the operation of the inhibitory function of the vagus. To the inhibitory influence of the vagus Dr. Moxon refers the pallor which often commences the epileptic fit, and at one time attracted so much attention as a means of explaining the phenomena of the fit. Another subject for consideration in connection with the condition of consciousness, is the amount and position of the cerebro-spinal fluid, as has been suggested by cases of concussion of the brain. Under all conditions, and most of all in sudden attacks, loss of consciousness must constitute a most important feature, often requiring considerable acquaintance with physiological anatomy to obtain an adequate explanation; although it is a fact which would be hardly anticipated of a phenomenon having so formidable an appearance, that its presence by no means indicates the degree of gravity appertaining to the condition of which it forms a part.

before the Edinburgh Medico-Chirurgical Society, by Dr. McBride, Surgeon to the Ear and Throat Department of the Edinburgh Royal Infirmary; and was published in the Edinburgh Medical Journal of March. The paper is entitled "A Rare Form of Laryngeal Neurosis," a title which I have copied for my present paper. It is based upon a case observed by the author, and is supported by the details of nine other cases, gathered from various sources. The first four are from Charcot, who regarded them as forms of laryngeal vertigo, an analogue of Menière's disease; the superior laryngeal nerve constituting the different channel. The main feature in all these cases consisted of a quite sudden attack in which the patient dropped on the ground, immediately preceded by a short dry cough, and sometimes by spasmodic breathing. Unconsciousness occurred at the moment in six of the ten patients; in the other three it was absent. In some patients the attacks were very frequent, even fifteen in a day. In all they ended quickly, and left the patient entirely unaffected; and in this, as well as in other respects, they were clearly separate from the epileptic group. As Dr. McBride observes, the character of the attacks was that of syncope; the word "vertigo" employed in the description of several of the cases being plainly not used in the distinctive sense, as no motorial phenomena are referred to as having been experienced by the patient.

Dr. McBride has no difficulty in assigning the larynx as the starting point of the attack. Not only does the attack commence with a spasmodic cough, but in almost every instance the immediate precursor is a tickling or burning sensation in the region of the larynx. One of the patients distinctly stated that he was conscious of his larynx being the starting point. In almost all the patients

local lesion was present in the larynx or pharynx, chiefly a state of hyperæmia, or a granular condition ; and marked benefit was derived from local medication, assisted by administration of bromide. As to the nature of the attacks, the author removes them from the group of vertigo, and regards them as consisting of syncope, following the laryngeal spasm which the local phenomena prove to exist. The syncope he explains as being the result of the severe pressure exerted upon the thoracic organs when a forcible attempt at expiration is made, with the glottis closed, after the full inspiration which precedes a cough has been taken. The air contained within the chest is thereby compressed ; the compression extends to the heart and great vessels ; the entry of fresh blood into the chest is excluded ; and the escape of that already within the cavity is hastened. He supports his reasoning by a sphygmographic tracing taken under the conditions just stated, which shows great diminution in the volume of the pulse, almost amounting to extinction ; and also by some experiments made by Weber on himself, with the effect of inducing actual syncope, with slight convulsive movements, when the experiment "had been carried too far."

The origin of the laryngeal spasm will of course vary in different cases ; in a severe paroxysm of typical auditory vertigo which I witnessed lately, it appeared as if laryngeal spasm may sometimes even be a part of the vertiginous paroxysm, a secondary result of the mechanism by which the equilibrating centre was disturbed, propagated to the larynx through the vagus. The attack, which implicated both aural and visual centres, and was of short duration, was followed by a peculiar and very troublesome cough, purely laryngeal. Such a case of course does not fall within the present group.

Attacks of unconsciousness attending a violent cough are not unknown to most medical men, and it seems not improbable that, if the immediate precursors of the attack be carefully noted, the form of laryngeal neurosis which Dr. McBride has demonstrated may prove not to be so infrequent as is implied in the title of his paper.

The following brief note of a case lately under my own observation affords remarkable attestation to the correctness of Dr. McBride's explanation, by the very description given by the patient. It is on this account chiefly that I report it, and also with the view of calling attention to the rather remarkable series of phenomena which characterises these attacks.

A gentleman, aged about 50, has had irritation at the apex of the right lung, for the last twelve or fourteen years, resulting probably from a limited catarrhal pneumonia. It has produced recurring attacks of local catarrh.

In attending him lately for one of these attacks, he mentioned to me that occasionally, when suffering from his attacks, which are always attended with cough, he has suddenly dropped, perfectly unconscious, only remaining so for a very brief period, and when consciousness was recovered returning at once to his previous state of health, without any unpleasant effect remaining.

On asking him respecting the connection between his cough and these fits of insensibility, he at once replied emphatically, "It is not when I cough that these fits occur, but when I cannot cough ; I try to cough several times and then I drop." They are preceded by a tickling in the region of the larynx. He has had about eight attacks ; the first occurred at the commencement of his disease, the last about two years ago. They were referred by his surgeon to venous engorgement. He has a

decidedly nervous constitution; and I may add that some of the patients whose cases are quoted by Dr. McBride, had exhibited a neurotic tendency; in his own case the liability had been preceded by the lodgement of a fish bone in the patient's throat, causing marked laryngeal trouble.

EPIGASTRIC NEURALGIA.

BY JOHN HOSACK FRASER, M.B. (EDIN.)

THE following reports of two cases of epigastric neuralgia are, I hope, instructive, and likely to interest the profession.

Case I.—W. S., a male, aged 48 years, was examined by me in the month of March, 1883.

His complaints were pains in the epigastrium and back, mental perturbation, and general weakness.

The history of previous illnesses.—About twelve years ago, he sustained concussion of the spine in a railway collision, and since then he has been in a delicate state of health, and has suffered at times from lassitude, headache and pain in the back, the last named symptom frequently alternating with the headache. *The history of the present illness.*—About three years ago he was seized with severe pain in the epigastrium, which has continued to trouble him at intervals up to the present time (March 1883). The pain is intermittent, and is aggravated by pressure on the epigastrium. For the last twelve months he has suffered from increasing emaciation and loss of strength. *His state at the time of examination.*—External appearances.—He has an anxious expression, and looks pale, haggard, and melancholic. His body is much emaciated.

NERVOUS SYSTEM.—I. *Cerebral and mental functions.* He complains of headache, sleeplessness, irritability of temper, and great mental depression, which is accompanied with suicidal tendencies. He states that the pains have made his life intolerable, and that he wishes he was dead.

II. *Sensory functions.*—(a) *Sensations.*—He complains of pains in the epigastrium and the back, the pain in the latter situation being referred to an area which is placed about two inches to the left of the spine, and a little higher up than the part which corresponds with the epigastrium posteriorly. The pains intermit, and may come on at any time during the day or night. They do not bear any relation to the ingestion of food, and are not affected by diet.—(b) *Sensibility.*—There is some hyperaesthesia in the epigastrium.—(c) The special senses are normal.

III. *Motor functions* are unaffected.

IV. *Vaso-motor and nutritive functions.*—There is general pallor of the surface of the body when he is suffering from paroxysms of pain. Muscularity is diminished.

V. *Examination of the spine.*—The form and appearances are normal, and there is no tenderness in any part of the spine.

Diagnosis.—Neuralgia. This opinion was confirmed a few weeks subsequently by Sir William Jenner, who made a careful examination of this patient. *Prognosis* is very favourable.

Treatment.—All the following remedies have been tried, but they have not influenced the course of the disease, viz. :—Arsenic, iron, quinine, colchicum, iodide of potassium, nitrate of silver, manganese, chloride of ammonium, chloral, and nepenthe. Sinapisms, various liniments, and electricity have also failed to affect his condition. About the middle of June, 1883, subcu-

taneous injections of morphia were commenced night and morning, and from that time the pains began to diminish steadily in intensity, and became less frequent; his general condition improved, and at the end of a month he had complete immunity from his suffering, and was restored to a better state of health than he had enjoyed for years.

Progress.—I have seen him on one occasion this month (May, 1884), and he states that he has been enjoying good health, and freedom from pain since July, 1883.

Case II.—G. M., a male, aged 35 years, was examined by me in the month of January, 1884.

His complaints are pains in the epigastrium and back.

History of previous illnesses.—About two years ago he suffered from epigastric pain, which was unaccompanied by any gastric or intestinal symptoms. It lasted more or less for a period of ten months, and during that time he consulted five medical men, without deriving any benefit from the remedies which were prescribed by them. Eventually the pains left him quite suddenly and unexpectedly.

The history of the present illness.—About three months ago he began to suffer again from pain in the epigastrium, which was sometimes associated with pain in the back. The paroxysms of pain have been at times so severe as to amount to the acutest agony. Since the beginning of the present illness he has consulted two medical men, but their treatment did not produce any effect on his complaints.

His state at the time of examination.—External appearances:—His complexion is fair; his face is rubicund. His expression is bright and cheerful.

NERVOUS SYSTEM.—I. *Sensory functions.*—(a) *Sensations.*—He complains of pains in the epigastrium, and

in his back. The pains are intermittent, and usually he has a paroxysm about eleven o'clock in the forenoon of each day, but the pain may come on at any time. It is very rare, however, that his rest is disturbed by pains at night. The pain in the back is situated about three inches to the left of the spinal column, and does not correspond with the epigastrium, being situated a little higher up.—*(b) Sensibility.*—There is hyperæsthesia in the epigastrium and in the painful area in the back. *(c) Special senses* are normal.

II. *Motor and vasomotor functions* are perfectly normal.

III. *Cerebral and mental functions.*—He is generally very cheerful. He usually sleeps well at night, but occasionally his rest is disturbed by pain.

IV. *Examination of the spine* reveals nothing abnormal.

Diagnosis.—Neuralgia. Prognosis is favourable.

Treatment.—I commenced at once to administer large doses of the liquor morphiæ muriatis three times a day, and from that time he has had no recurrence of the pains. He took the morphia regularly for three weeks, and at the end of that time it was entirely given up.

Progress.—I saw him last week (June 28th, 1884), and he says he has not suffered pain since January of this year.

Remarks by Dr. Hosack Fraser.—A consideration of the facts of these two cases, which I have selected as typical of epigastric neuralgia, must make it manifest to the most casual observer, that this affection is very apt to be mistaken for certain other conditions of a widely different nature. When a patient comes to a medical man, suffering from epigastric pain, he is often too ready to refer that symptom to a derangement of the stomach. Now that was precisely what happened in the above cases, and, moreover, this error of judgment was not confined to one individual, but was shared equally by several others.

Since I am convinced that such mistakes are often committed by men who possess exceptional qualifications, and enjoy deservedly high professional reputations, it would be superfluous on my part to excuse myself in bringing this subject before the profession. I shall now proceed to discuss the chief points of interest in the history of the first case.

The patient (Case No. I.) was treated, in the first instance, for *dyspepsia*. It is evident that, if anyone had given a moment's consideration to the case, he could never have committed such a remarkable blunder. This person had an absence of all the ordinary symptoms of dyspepsia. How then could it be said that the patient was suffering from such an affection? The only explanation that I can offer is, that the medical attendant very naturally associated epigastric pain with a disordered stomach, and did not stop to enquire how he was justified in arriving at such a diagnosis in the absence of gastric symptoms.

Secondly, it was thought to be *gout*. Well, this was a suggestion that was worthy of serious consideration, as he undoubtedly belonged to the gouty diathesis. Antigouty remedies were tried for some time without influencing the course of the affection, and, after a fair trial, this line of treatment was abandoned.

Thirdly, it was said that he was suffering from *dilatation of the stomach*. How that diagnosis was arrived at, is to me quite inexplicable. Physical examination showed that the stomach was of normal size, and, moreover, there was no nausea, sickness, or vomiting, and such symptoms would be certain concomitants of a dilated stomach.

Fourthly, it was suggested that he might be suffering from *cancer*. This was a view which had some degree of probability in it. He had been suffering from increasing

emaciation and weakness, and his whole appearance and condition suggested to one the idea that he was the subject of some grave wasting disease. But, against this view, there was an absence of physical signs, and besides there was no disturbance in connection with the stomach or bowels.

Lastly, it was considered to be *neuralgia*. There were many features in this case to commend that view to our consideration. From the history we learnt that he had sustained a severe nervous shock about twelve years ago, and that he had never been in good health since that accident up to the date of the present illness. He had suffered more or less from headache, lassitude, and pain in the back, for nine years, and then there was added to these symptoms severe epigastric pain, which was followed by mental depression, sleeplessness, irritability of temper and suicidal tendencies. Then, the character of the pain was distinctive of neuralgia. It intermitted, and might come on at any time of the day or night. It was not affected by diet, and did not bear any relation to the ingestion of food. Again, there was an absence of physical signs, and of gastric and intestinal symptoms, and these negative conditions very materially assisted me in arriving at a correct diagnosis. And finally, in connection with this case, the treatment confirmed the diagnosis, and it shows that morphia is to be regarded, in neuralgia, not only as a palliative agent, but also as a curative one.

Now as to case II., there is very little left for me to say. Indeed, if I discussed the facts of this case at length, I would be repeating, in a great measure, the observations which I have just made with reference to the former one. This case, however, differs from the former inasmuch as there was an absence of emaciation and weakness, and

also of mental disturbance. This patient's nutrition was unaffected, and he was not subject to mental depression, on the contrary, he looked bright, cheerful, and happy, in the intervals between the paroxysms. His complaint was mistaken for dyspepsia and gout, and he failed to derive the slightest relief from any other remedy than the morphia, which really acted like magic on his complaint.

REVIEWS.

THE INTERNATIONAL ENCYCLOPÆDIA OF SURGERY.*

THE fourth volume of the International Encyclopædia of Surgery contains seven monographs, each of which may be accepted as a well-digested treatise on the subject it deals with; of these, three emanate from the pens of London surgeons. In appearance, quality of the paper, printing, chromo-lithographs, and wood-cuts, the book reaches the standard of excellency of its three predecessors. The subjects considered mainly relate to the osseous system; the one exception is the article on tumours, which apparently has been inserted in place of one by Professor Ollier, on bone diseases, and which its distinguished writer had found it impossible to complete in time.

Article I.—"Injuries of Bones," by John H. Packard, M.D., of Philadelphia, occupies no less than 260 pages. It is an able contribution, and, in the main, may safely be taken as a trustworthy guide for practical reference. Still, it is somewhat strange to be told, that in the treatment of ununited fractures, Listerian precautions may be adopted, because if they do not do good they will not be absolutely harmful. The benefit of this method of dressing in

* The International Encyclopædia of Surgery. Edited by John Ashhurst, jun., M.D. Vol. iv. London: Macmillan and Co. 1884.

compound fractures of the elbow-joint is thus admitted—"pure water applied when a serous membrane is laid open acts as an irritant, but a weak acid solution prevents inflammation." The pages devoted to Colles's fracture of the radius are notably good, and in the treatment of the same, prominence is given to Levis's splint, an apparatus not much known in this country, but certainly of value, and comprising utility and simpleness. It is rather with surprise that we find the author holds that in fracture of the patella, aspiration of the knee-joint, to draw off the blood and fluid exudation, is regarded as an unjustifiable and rash procedure, and attended with risk, for in skilled hands this small operation is attended with the best results. A great many plans of treating this fracture are enumerated, but Stevenson's splint, a very satisfactory method, is omitted. The wiring of the fragments is mentioned, but the writer gives his personal opinion on the merits or otherwise of the proceeding.

Article II.—"Diseases of the Joints," by Mr. Richard Barwell. This surgeon was also the author of the article on Aneurism in a previous volume, but no one will dispute his authority on the present subject. The monograph dealing with the same diseases is so well known and appreciated by English readers that it is merely necessary to say that the present essay contains all the previously expressed views of the author, and is well up to date.

Article III.—"Excisions and Resections" is by the Editor, and deals very fully with these subjects. The first portion is historical; then follow the indications and contra-indications, and rules for excising generally; next come the excisions of special joints. All these points are considered at length and with much thoroughness. The fact is brought forward that childhood and early youth are the most favourable periods for resection to be performed. In dealing with the elbow joint it seems unnecessary to give full details of seven cases of the operation simply because they occur in the practice of the writer, and more especially when one instance is a man, aged 56, affected with rheumatic arthritis, and the termination being fatal.

In excision of the wrist joint we agree with Dr. Ashhurst that the indications for performing the operation are seldom met with, as it is wonderful what recoveries nature

will effect if assisted by rest and hygienic measures. Under excision of the hip a case is recorded in which the heads of both femurs were removed within seven and a half months of each other. The patient was eventually reduced to crutches for the purposes of progression.

Excision of the knee joint is considered twice over, viz., by Dr. Ashhurst and in a separate article (No. IV.) by Dr. George E. Fenwick, of Montreal. The special method advocated by the latter surgeon is to remove the diseased condyloid surface with a fine fret-work saw, so that the sawn bone presents a roundish surface. In the tibia the articulatory surface is so taken away as to render the remaining surface concave. Hence, on approximation, the bones become, as it were, locked. P. H. Watson's splint is used in the after treatment. A table of 28 cases, with 24 recoveries is given. Two out of the four failures underwent amputation of the thigh; one died of pyæmia, the result of the other was doubtful.

Article V. is on "Tumours," the writer being Mr. Butlin, of St Bartholomew's. No English surgeon is more competent to undertake such a task, and the work has been done well. The plates depicting the microscopic appearances of the various tumours are for the most part clear and good. Chromo-lithographs illustrating sarcoma of the humerus, Paget's nipple, atrophic mammary carcinoma of the aged, and two of rodent ulcer, all emanate from the Pennsylvania Hospital.

Article VI.—"Injuries of the Back," by the late Dr. Lidell, of New York. In the preface to the volume we find a note from the Editor stating that the death of the writer of the article will account for Mr. Herbert Page's views on railway injuries of the spine not being taken notice of. The various kinds of wounds of the soft parts of the back are first considered; 2nd, Sprains, twists, and wrenches; 3rd, Dislocations of the Vertebrae, from which numerous recoveries are noted; 4th, Fractures of the Spine. Under this head will be found a rich collection of clinical cases, gathered from all available sources. In all possible cases Dr. Lidell advocates treatment by continuous extension, and especially when the fractured fragments are not readily kept in position. Reference is made to König's plan of applying Plaster of Paris jackets in these cases. Resection and trephining of the spinal

column is regarded as unjustifiable because "it does not offer a reasonable prospect of improving the patient's condition in any case, while, on the other hand, there is always reason to fear that it may increase the chance of a fatal termination." A table of 43 cases in which the operation has been performed is given. Gunshot injuries of the spine are also dealt with at length, and allusion is made to President Garfield's case.

Article VII.—Mr. Treves, of the London Hospital, considers "Malformations and Diseases of the Spine" in a concise but exhaustive manner. Spina Bifida and Potts's Curvature are specially well handled. Sacro-Coccygeal Tumours and Spondylitis Deformans are likewise detailed. With regard to the latter the author pithily remarks, "that by the aid of that mysterious power that appears to influence the selection of scientific terms, the title spondylitis deformans has been applied to one definite disease, viz., chronic rheumatic arthritis of the vertebral articulations."

In conclusion, we may say that, as a whole, the fourth volume of the series is an eminently satisfactory one.

ON THE TREATMENT OF SPINAL CURVATURES, ETC.*

DR. JONES expresses himself as more than repaid if the Essays he presents to his fellow practitioners show that "fair all round work" can be done by those who are willing to labour conscientiously and perseveringly. Such being his modest reward, we may fairly say that he has attained it, and even gone beyond it, for he has added to our knowledge of the subjects upon which he writes.

The first half of the publication is devoted mainly to the discussion of the value of Sayre's method of treatment in lateral and angular curvature, and of this method the author expresses a general approval as follows, p. 44:—"First, I have not found any settled deformity in angular curvature influenced by the employment of Sayre's method. Secondly, I have seen in the

* On the Treatment of Spinal Curvatures, etc. By H. Macnaughten Jones, M.D., M.Ch. London: J. and A. Churchill.

early stages of Pott's disease, and when it was threatening, decided arrest of the disease, and complete removal of any deviation then appearing. Thirdly, when this treatment has been carefully followed I have found complete cure and removal of deformity in slight lateral curvature, and I have seen marked improvement and relief of all the distressing symptoms in advanced and severe cases of lateral curvature. I have not seen complete removal of the deformity in any well-marked case of lateral spinal curve. Fourthly, I have seen wonderful restoration to health, and splendid results, both from the plaster and poro-plastic jacket combined with the suspension treatment, when all other methods of treatment had failed."

The remaining chapters contain some interesting remarks upon the treatment of diseases of the hip, knee, and ankle joints. With reference to the hip, Dr. Jones accepts the origin of the disease as generally constitutional. He considers aspiration useful if abscess is detected early, and he advises excision of the head of the femur when suppuration is established beyond relief by aspiration.

In his *Conservative Surgery of the Ankle and Tarsus*, Dr. Jones is much to be congratulated, for out of most unpromising cases he has obtained excellent results; an instance of which is a girl from whom he excised the malleoli and tarsal bones, and who four years afterwards was walking with only a trace of lameness. One small exception may be taken to these Essays; it is to the room expended upon illustrations of instruments and appliances with which every surgeon ought to be familiar.

ELEMENTS OF HISTOLOGY.*

DR. KLEIN'S reputation as a histologist is sufficient guarantee for the value of any work to which his name is attached. The atlas recently published by him, shows how competently he has studied all departments of this subject. This little manual offers for a very moderate price and in a small compass the cream of the contents of the atlas. The need for such a work has been much felt of late years, since Kölliker's manual has got out of print and is not quite up to date, and Quain's *Anatomy* has passed into other and feebler hands.

* *Elements of Histology.* By E. Klein, M.D., F.R.S. Cassell & Co. Limited, 1883.

HANDBOOK OF GEOGRAPHICAL AND
HISTORICAL PATHOLOGY.*

PROFESSOR HIRSCH has made himself the great modern authority upon the historical and geographical distribution of disease, so that we are much indebted to the New Sydenham Society for presenting the profession with Dr. Creighton's excellent translation of this monumental work. No praise is too great for the indefatigable industry with which Prof. Hirsch has accumulated his materials, which are presented in the text in a well digested form, and discussed in a philosophic spirit. He is an eminently cautious thinker and rejects many plausible and widely received doctrines as unproved or only part of the truth. The present volume deals with diseases of the widest human interest, such as plague, cholera, malaria, typhus, &c., and upon each of them it is a complete mine of knowledge. Every practitioner will have his conceptions of diseases widened by reading Prof. Hirsch's book, while all teachers and diligent students of their profession will find it an indispensable work of reference.

HAY FEVER,
ITS ETIOLOGY AND TREATMENT.†

THIS lecture has already appeared in the British Medical Journal. It is a good resumé of our knowledge of this subject, but contains no very substantial additions to our pathological or therapeutical information. Dr. Mackenzie believes in the prophylactic use of a pill composed of one grain of valerianate of zinc and two grains of compound assafœtida pill, three times a day, in the use of a veil to protect the face, and in small doses of opium during the attack.

* Handbook of Geographical and Historical Pathology. By Dr. August Hirsch, Professor of Medicine in the University of Berlin. Vol. i. Acute Infectious Diseases, translated from the Second German Edition by Charles Creighton, M.D. London: The New Sydenham Society, 1883.

† Hay Fever, its Etiology and Treatment. By Morell Mackenzie, M.D. London: J. and A. Churchill, 1884.

SCIENCE AND SINGING.

Mr. Lennox Browne writes to point out that in the notice of his pamphlet on Science and Singing the writer fails to notice that the "deep red colour" of the vocal chords was caused by the transmission of light from below, and is not to be confounded with the same appearance when the chords are illuminated from above.

REPORTS OF SOCIETIES.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH OF
THE BRITISH MEDICAL ASSOCIATION.

Annual General Meeting, June 19th, 1884.

Dr. FOSTER (the retiring President) presided at the commencement of the proceedings.

New President.—Dr. Foster said he had to introduce his successor, Dr. Nason, of Stratford-on-Avon, who had been elected president of the Branch for the ensuing year. It gave him great pleasure to be succeeded in the office by a member of the profession who was so well known for his scientific and personal qualities as Dr. Nason, and whose name was so well known and respected.

Dr. Nason then took the chair; and, on the motion of Mr. A. Baker, seconded by Dr. Thursfield, a vote of thanks was passed to the late president, which was suitably responded to by Dr. Foster.

Report of Council.—Dr. Rickards read the report of the Council, which congratulated the Branch on its continued prosperity. The total number of members now stood at 343, and, during the past session, 10 new members had been elected, 8 had resigned, and 3 had been removed by death, namely, Dr. Hunt, Mr. Malin Sharman, and Dr. Parsey. Papers had been read by Dr. Sawyer, Mr. Bartleet, Mr. Solomon, Dr. Windle, Dr. Nason,

Dr. Whitcombe, Mr. Bennett May, Mr. Lawson Tait, Dr. Savage, Mr. Messiter, Mr. Chavasse, and Dr. Saundby. At a special meeting, Dr. Burney Yeo (London) gave an address on acute pneumonia, one of the subjects chosen by the Collective Investigation Committee for investigation. During the past year, an important change had been made in the construction of the executive of the Association. The body which was formerly called the Committee of Council, was now the Council of the Association. It was constituted to a large extent by the representatives elected by the Branches, the number of representatives from each Branch being in proportion to the number of the members of that Branch. Each Branch now electing its representatives on the governing body of the Association, the Council of the Association as formerly constituted had been abolished. In consequence of these changes, the laws of the Association were altered, and it became necessary to revise those of the Branches, that the two might harmonise. The Council had watched with deep interest the development in the profession of a society for the assurance of medical men against sickness and incapacity from old age. The matter had been taken in hand, and a society had been promoted which promised to be successful, and to meet a long felt want. Dr. Rickards, after serving as secretary for five years, had resigned. The report concluded by referring to the prosperous condition of the parent institution, which now numbered over 10,000 members.

Mr. Bartleet, in moving the adoption of the report, said it was extremely gratifying to learn that the question of medical assurance had been taken up, and he thought the movement would be of great benefit to the profession. He also regretted the resignation of the secretary (Dr. Rickards), whose place it would be extremely difficult to fill.

Dr. Simon seconded the motion, and it was carried.

Balance Sheet.—Mr. Oakes (the treasurer) presented the balance sheet, which showed that there remained a balance in hand of £35, as compared with £75 last year.

The Reports of the Pathological and Clinical Sections, and the Collective Investigation Committee, were read by Dr. Saundby and were adopted.

Officers and Council.—The following were elected:—*President-elect*: James Sawyer, M.D.; *Treasurer*, A. Oakes, Esq. *Honorary Secretaries*: A. H. Carter, M.D., and R. Saundby, M.D. *Representatives of Branch in Council of Association*: B. Foster, M.D., and A. H. Carter, M.D. *Council—Country Members*: S. H. Agar, Esq. (Henley-in-Arden); G. F. Bodington, M.D. (Kingswinford); H. L. Browne, Esq. (West Bromwich); W. C. Garman, Esq. (Wednesbury); J. H. Joy, M.D. (Tamworth); H. R. Ker, Esq. (Halesowen); F. E. Manby, Esq. (Wolverhampton); T. W. Thursfield, M.D. (Leamington). *Town Members*: T. H. Bartleet, M.B.; T. F. Chavasse, M.D.; Jordan Lloyd, Esq.; E. Malins, M.D.; Bennett May, M.B.; E. Rickards, M.B.; T. Savage, M.D.; Priestley Smith, Esq.

President's Address.—The new President, Dr. Nason, then delivered an address.

At the conclusion of the address, a vote of thanks was passed to the President, on the motion of Dr. Wade, seconded by Dr. Malins, and the meeting concluded.

MEDICAL NEWS.

DR. W. B. BERRY ON THE DISEASE OF CATTLE KNOWN AS REDWATER.—Mr. Hutcheon and the writer believe this disease to be very different from that which in Great Britain goes by the name of redwater. As observed by them, the disease is believed to be peculiar to South Africa. The Commission suggests that its technical name be *Hæmatinuria Bovum Maligna*, a name which, to the professional reader, carries its own implication. It belongs to that sub-class of infectious diseases which Ziegler calls the miasmo-contagious. It spreads through the contamination of the food or drink of the cattle by reason of the droppings of the infected. There is a period of incubation of probably fourteen days. In a typical case the urine is of a port wine colour, and becomes almost solid with heat. No red corpuscles are seen in urine with the microscope. This hæmatinuric condition generally persists four or five days, and is very fatal. Internally the most noticeable alterations are seen in the spleen, which

swells to two or three times the normal size, and becomes softened and diffuent. Dissection wounds appear to give no trouble to men. In the splenic blood the writer has succeeded in detecting a bacillus, for which he proposes the name of *B. Hæmatinuriæ*. This new bacterial form, together with *B. Anthracis* and *B. Malaria*, probably belongs to Pasteur's class of aërobious fungilli. *B. Hæmatinuriæ* was demonstrated in the following manner. A drop of thick splenic blood was thinned with a few drops of distilled water. A drop of the thinned blood was placed on a cover glass and dried in air. When thoroughly hard, a drop of glacial acetic acid was allowed to rest over the spot on the cover glass for a few seconds, after the recommendations given by Dr. Vandyke Carter for the detection of *Spirillum* (in his work on *Spirillum* Fever, page 334). The cover glass was now washed in distilled water, when there remained on it only a very thin transparent polish just visible to the eye. Two cover glasses were so prepared, and were then passed once or twice through the flame of the spirit lamp to harden the polish. Into one watch glass a few drops of the aniline stain known as "gentian violet" were poured; into another a few drops of "amaranth"; and the cover glasses prepared as above were floated on these stains respectively. Each watch glass with its contents was slightly warmed over the lamp, and the cover glass allowed to remain in the stain about four minutes; when they were washed in rectified spirit, dried, mounted on slides on Canada balsam, and run round with Hollis' glue. The slides were now examined with a Beck's 1-10th inch water immersion objective—a lens which Heneage Gibbs well describes as "splendid and cheap," and which commended itself much to the writer for the reason that, though the one he has left London only a few months ago, it fits with perfection into the Beck's binocular stand with which he has worked off and on for nearly twenty years. Both slides showed Bacilli, the one stained with gentian violet being perhaps the better of the two. The bacilli were in considerable numbers, and appeared to be in various stages of "sporation" lengthening; some having one or two, others three or four, a few as many as nine spores in their length. Contrasted with *B. Anthracis*, *B. Hæmatinuriæ* is shorter and thicker, being deficient in those delicate and graceful curves which characterise the other. Plates only of

B. Malariae have been available for comparison, and so far as they permit an opinion, it would be correct to say that the new *fungillus* is more like *B. Malariae* than any other bacterium hitherto described. The urine has been subjected by the writer to similar treatment and examination microscopically; but hitherto he has failed to detect bacilli in that fluid. He is not sure whether *B. Hæmatinuriæ*, thought to be found in the spleen, should be met with in the urine. Tubercle bacilli have been found in the urine of phthisical patients in England (Lancet, vol. i., 1883, p. 942); and the writer has found them in the expectoration and urine of the same kind of patients in this colony. He is not aware, however, that *B. Anthracis* has been found in the urine of anthrax patients; and he finds no mention made of the occurrence of *spirillum* in urine by Dr. Vandyke Carter. There is a practical difficulty in the way of the demonstration; for when one drop of the urine on the cover glass is hardened in the flame of the spirit lamp, the albumen of course solidifies and may interfere with the action of the stain on the delicate walls of the bacillus.—South African Med. Journal.

TREATMENT OF HYSTERIA.—In accordance with the view that hysteria is a psychical disease, Liebermeister (Volkmann's Sammlung) makes the following observations concerning its treatment, which we extract from a translation by A. F. C., in the American Journal of Obstetrics:—The treatment must be, to a great extent, psychical, but this does not imply a disregard of other means, especially when there is evident disease of any of the organs or parts. The etymology of the word hysteria (*ὑστέρα*, the uterus), of course, implies disease of a particular organ, but it is often the case that no disease of the uterus can be made out. On the other hand, hysteria may be cured, and yet disease of the uterus or the other genital organs remain. Castration, and removal of the clitoris, are quite disapproved of by the author, when they are to be performed in order to cure hysteria; and rather faint praise is given to other gynecological treatment for this purpose. As the general condition of the patient improves, the hysteria is likely to improve also. Change of residence, certain water-cures, baths, exercise, etc., are recommended, and directions are given which are suited to particular types of the disease. Among psychical instrumentalities,

the author recommends the provocation of joy and hope. Hypnotism, which is advocated by some, is calculated, in the author's opinion, rather to excite than to cure hysteria. Inherited tendency and education are always to be regarded in a consideration of the prophylaxis of the disease, and if self-control and a sense of responsibility in regard to duties to be performed can be inculcated, the result will be a satisfactory one. The more striking phenomena will call for special treatment. If the attacks take the form of spasms, ecstasy, or somnambulism, consciousness will be only partially abolished, and in this fact will lie the differentiation from actual disease, though hysteria and the disease which it simulates may co-exist. For the treatment of such attacks, cold water poured over the surface of the body is recommended. The induction current is also a useful instrumentality. Aborting a first attack may also result in cutting short the disease, or, at least, in delaying it. Metallo-therapy has been tried by the author in the treatment of hysterical anesthesia, but its effect, if any, is thought to be only upon the imagination. One of the main elements in successful treatment consists in gaining the entire confidence of the patient, and another in causing her to abandon the habit of brooding over herself and her condition. Medication is usually superfluous.

KAIRIN IN ENTERIC FEVER.—Dr. T. A. McBride, of the New York Hospital, speaks well of this drug, administered in seven-grain doses every hour until the temperature fell to about 101°F. In addition to lowering the temperature it usually induced copious diaphores after a few doses. No bad results had followed its administration in small doses.—*New York Medical Journal*, November 17, 1883.

THE PROPOSED MEDICAL SECTION OF THE POSTAL
MICROSCOPICAL SOCIETY.

To the Editor of the "Birmingham Medical Review."

Sir,—I beg you will allow me the opportunity of stating briefly the object which I hope to attain by the formation of this new Section, which is this:—

The means of furnishing Members of the Medical Profession with such slides as they are naturally most

interested in, and such Notes in relation thereto, as will not only anatomically describe the slides under observation, but will, where practicable, give a full history of the cases from whence they were taken, duration of the disease, the methods of treatment adopted, and every other matter of interest likely to prove of any educational value to all succeeding members.

To accomplish this it is proposed that every Member shall send to the Hon. Secretary for circulation, six slides (or any multiple of six) with full descriptive notes thereon, to be written in the book, or books, provided for that purpose, and each member receiving the same, will be asked to add all that he can in further elucidation of the various subjects under discussion.

Boxes containing twelve slides will be circulated at regular dates, and in such a manner that each member should receive one at fortnightly intervals.

When each set of slides has been seen by all the members it will be returned to the original contributors who will be asked for a fresh supply; and that each series (or set) may circulate for a whole year, it is necessary that at least *Fifty* members be enrolled. Several have already sent in their names. As the fees for the Medical Section (separately), will be the same as for the General Section, it is thought desirable that the two Sections shall run concurrently, the first year's subscription, therefore, will carry on to the 30th September, 1885, and will, after the first year, become due on the 1st October in each year.

The first session will commence as soon as a sufficient number of slides have been received.

Members of the Medical Section will be at liberty to join the General Section also, on paying *half* Annual Subscription extra.

A copy of the "Journal of Microscopy" is presented to every Member quarterly, as published.

I am, very faithfully yours,

ALFRED ALLEN,

Hon. Sec.

Miscellany.

THE SONG OF THE TUBERCLE BACILLUS.

(Translated from the German of the Wiener Caricaturen, March, 1884.)

Owner of the strongest glasses,
And the sharpest eyes to pore;
Famous chief, enough your triumph—
Koch, what would you with us more?

In the lungs we dwelt in safety,
Till you came with cruel lore;
Stained us blue, and magnified us—
Koch, what would you with us more?

You have planted us and bred us
In a dog! Oh! trial sore!
Robbed our nature of each secret—
Koch, what would you with us more!

We repent us of our evil,
Bitter tears our sad eyes pour;
Self-consumed, we die of phthisis—
Koch, what would you with us more!

SURVIVAL OF THE FITTEST.—Prof. Huxley, says a Record correspondent, was once asked by a clergyman to explain, in the light of evolution, how it is that the Jews continue to be born with foreskins, notwithstanding the fact that circumcision has been practised among them for thousands of years. The naturalist answered, aptly, "There's a divinity that shapes our ends, rough-hew them how we will." This way of sparing one's self the pains of answering a difficult question by a witty turn upon a poetical quotation recalls a similar use of the same means made by a clergyman of a past generation. A lawyer asked him why ministers were ever busying themselves with public disputations in theology, while lawyers so seldom engaged in open controversy upon points of law. "The explanation is easy," said the minister. "Hear how Milton answers the question:—

'Devil with devil damned
Firm concord holds, *Men* only disagree.'"—

Louisville Medical News.

PHARMACEUTICAL HARMONIES.—It was a hyper-esthetical, ultra-poetical young lady who discharged her medical attendant because he ordered her to take a blue pill. Any one, she maintained, who could not discover that blue did not suit her complexion, could not be much of a doctor.—*Medical Age.*

New Books, &c., Received.

A New Method of Treating Chronic Glaucoma. By GEO. L. JOHNSON, M.A., M.B., B.C. Cantab. London: H. K. Lewis. 1884.—The Alpine Winter Cure. By A. T. TUCKER WISE, M.D., etc. London: Baillière, Tindall, and Cox. 1884.—Atlas of Portraits of Diseases of the Skin. Fasciculus xvii. New Syd. Soc. 1884.

THE
BIRMINGHAM MEDICAL REVIEW.
SEPTEMBER, 1884.

ORIGINAL COMMUNICATIONS.

ON CYSTIC DEGENERATION OF THE
KIDNEY.*

BY LL. JONES BATEMAN, B.A., M.B., B.C. CANTAB, M.R.C.S. ENG.

IN speaking of Cystic Degeneration of the Kidney, it must be understood, that simple cysts, which are occasionally found in that organ, are not included; the term being applied only to those cases in which the kidneys are converted into a mass of cysts. This condition occurs as a rare disease, either congenitally or in the adult. Whether it is the same process in both that leads to this form of degeneration will be considered later on in the thesis.

The diagnosis of the disease is evidently one of some difficulty, for I can find but few cases in which this condition was detected during life. Perhaps this may be due to the fact that no good clinical description of the disease has yet been written; and only in a few instances have the symptoms, and previous history of those affected, been minutely recorded. The congenital form, it is true, can scarcely be said to possess a clinical history, for the infants so affected are almost invariably still-born, or if born alive, perish very shortly after their birth.

* A Thesis for the degree of M.B. Cantab.

The following points regarding the disease in the adult, collected from all the recorded cases I could find, are those of most interest. Males seem to be affected rather more frequently than females. Between 35 and 50 seems to be the age most especially liable to it ; 29 is the earliest age I can find recorded. In most of the cases the absence of any history of previous renal disease, or of conditions that are liable to induce it, is remarkable. In one case there is a history of hæmaturia* following injury ; in another, the patient had suffered from variola and scarlet fever ;† previous attacks of nephritis‡ are reported in a third ; in this case, however, I should gather from the context that the symptoms so described were probably due to the developing cystic kidneys. These are the only instances I can find of any previous damage to these organs. In the adult always, and almost invariably in the congenital form, both kidneys are affected, and usually the disease is about equally advanced in them ; occasionally there is a considerable difference in their size. They usually grow sufficiently large to make the presence of an abdominal tumour capable of diagnosis during life. The pressure of the enlarged organs on the neighbouring structures is no doubt the cause of the various pains that occur ; usually they affect the lumbar region, sometimes the epigastrium, or more rarely they induce a neuralgia of some of the nerves of the lower limbs. Occasionally the disease runs its course painlessly.¶ Patients affected with this disease usually suffer for some time previous to its termination from general ill-health and feebleness ; œdema, amaurosis, vomiting, headache, and other such general symptoms are mentioned. In a case that came

* Tran. Path. Soc., Vol. vi., p. 267.

† Rayer *Maladies des Reins*, Vol. v, p. 520.

‡ Ibid, p. 514.

¶ Boston Med. and S. Journal, 1881, p. 181.

under my notice at the Birmingham General Hospital there was hæmorrhage from the gums and rectum. The symptoms in fact resemble those occurring in Bright's disease, and probably are due to the imperfect elimination of urea. Attacks of hæmaturia and albuminuria, often intermittent, are usually mentioned; sometimes these symptoms seem never to have occurred* even just previous to death. The urine is generally of low specific gravity, it may be acid or alkaline, and usually increased in quantity, and of a pale colour in the intervals between the attacks of hæmaturia; but the real point of interest regarding it is the reported absence of casts†, even when they have been carefully searched for. The termination of the disease is ushered in by vomiting, convulsions, coma, and other uræmic symptoms. The diagnosis of the disease might be rendered easier by observing the following points: namely, that though albuminuria and hæmaturia might be present, no casts can be found, nor a cause assigned for these symptoms; the absence of a hypertrophied heart; and the presence of an abdominal tumour in both lumbar regions.

The prognosis of the disease can however be only one of a fatal result at some early period. The pathology of the disease is of considerable interest, and evidently one of some difficulty, judging from the various opinions that have been promulgated regarding it. Before considering them, it may, perhaps, be desirable to give an account of the cystic kidneys themselves. The same description will apply equally well to the congenital or adult form, with the exception that the latter naturally attains a larger size. All observers seem to agree that the cortical portion of the kidney is affected earliest and most extensively.‡ The

* Boston Med. and S. Journal, 1881, p. 181.

† Brit. Med. Jour. I, 1883, p. 1177, vide ||.

‡ Trans. Path. Soc., 1850, p. 131.

cysts are round or oval in shape, though this may be modified by mutual pressure. The contents of the cysts is a point of some importance; groups of cells* undergoing colloid degeneration have been found in them; no urea† or uric acid, or only the minutest traces of these substances have been found in the larger cysts, and only some observers have found these substances in the smaller ones; they, however, always contain cholesterine, and various albuminoid substances. On these grounds their contents must be regarded as being degenerated tissue, and not retained urinary secretion. The cysts vary in size, some being as large as a hen's egg, others having a diameter about twice as large as that of a normal convoluted tubule. Kidney substance more or less altered is always found in some portion of the diseased organs in the adult; it cannot, however, be always demonstrated in the congenital cystic kidney.‡ Most observers are of opinion that there is an increase of connective tissue in the remaining kidney substance,|| Klebs, however, finds increase of connective tissue wanting. The kidneys may attain a considerable size, even in the congenital form; in one case they were large enough to make embryotomy necessary.

The following are the various pathological opinions regarding the congenital form:—

Virchow§ attributes the formation of cysts to the inflammation of the straight ducts of the pyramids, (this occurring as a foetal nephritis) and a consequent blocking of the tubuli uriniferi followed by their dilation

* Trans. Path. Soc., Vol. xxi., p. 244.

† Med. Tim. and Gaz., Vol. i., 1852, p. 359 ; Robert's Urinary Dis., p. 512 ; Reynold's Syst., Vol. v., p. 610.

‡ Roberts, p. 506.

|| Vide Ziemssen Cyclopædia., Vol. xv., p. 641.

§ Gesammelte Abhandlungen, p. 837, vide Robert's Urin. Dis., p. 509.

by urine. He considers the malphigian capsules to be dilated in the same way, and as well as the tubules. He attributes the foetal nephritis to the impaction of uric acid, and urates in the ducts. As a result of this nephritis the renal papillæ and pelvis of the kidneys become obliterated. There are, however, some objections to this theory. Firstly, there seems to be no evidence that foetal nephritis ever occurs, and the foetus is certainly not exposed to conditions that are liable to induce it subsequent to birth. There are other reasons, which will be mentioned in treating of the adult form, that render the inflammatory theory of the origin of the disease unsatisfactory.

Köster* thinks that congenital cystic degeneration of the kidney is "due to a want of development, analogous to atresia ani, etc.," and he brings forward, in support of this opinion, the fact that the calices and pelves of the kidneys are often wanting, and he maintains that his theory is supported by Kupfer's investigations into the development of the kidney; for the latter investigator asserts that "the blastema of the tubuli uriniferi is developed by itself independently of the evolution of the Wolffian duct, which becomes ureter and renal pelvis." These facts, Köster says, "show that an abnormal development may occur which places the kidney in process of formation under totally different conditions from those existing in ordinary cases, where there is connection between it and the renal pelvis." That the origin of congenital cystic degeneration of the kidney is due to an abnormal development, no one I suppose would be prepared to deny; but this special form of abnormal development, which Köster maintains to be its cause, unfortunately for his theory, only exists in some of the cases, so we can hardly accept it as being complete.

* *Nederland. Arch.*, 1867. Translated into *Dub. Quat. Jour.*, Vol. xlv., p. 256.

As mention has just been made of abnormal development, perhaps this will be the best place to refer to the fact that successive children of the same mother are sometimes affected,* sometimes healthy children are born alternately with others thus affected. Other deformities† are also found. The absence of ureters and pelves has already been referred to, and is of frequent occurrence; cleft palate, meningocele, different forms of talipes, webbed and additional fingers have also been recorded;‡ a case is related by Henninger|| in which the left kidney was healthy, but the right cystic, and on this side of the body there was no lower extremity, and the right portion of the female generative organs were also absent. On this ground Henninger started the theory that cystic degeneration of the kidney is due to mechanical disturbance acting from without. The unilateral occurrence of the disease and of the other deformities in this case (and it is the only unilateral case I can find reported), no doubt supports Henninger's hypothesis; but he does not attempt to show why mechanical disturbance should cause absence of some organs, and cystic changes in another. Ziemssen refers to one case where the kidneys were cystic and atrophied, being about the size of beans; no renal tissue could be recognized in them, one ureter was closed, the other normal. This last fact shews that Köster's theory cannot be accepted, for obstruction of the ureter in one kidney could hardly produce cystic degeneration in the other, in which the ureter was patent.

No satisfactory theory that will account for all the cases of congenital cystic degeneration of the kidney has,

* Ziemssen Cyclop., Vol. xv., p. 640.

† Vid. Roberts, p. 508.

‡ Brit. and For. Med. Chir. Trans., Vol. ii., 60, p. 509.

|| Ziemssen Cyclop., Vol. xv., p. 642.

as far as I can find, been yet advanced ; in treating of the disease in adults, a theory will be mentioned that may possibly account for the origin of both forms.

The pathology of the adult form is equally interesting. The first point to be considered is whether it is the congenital form, only partially developed at birth, which remains latent till adult life, and then again becomes active. Wilks and Moxon* refer to cases in which the cystic change has been found in the kidneys of young subjects ; but they do not refer to the cases, and I can unfortunately find no record of them or similar ones, which one might reasonably expect to do, if this is the origin of the adult form of the disease. The formation of these cysts has been attributed to the abnormal growth of a single epithelial cell ;† but the want of evidence of this process occurring anywhere in the body, together with its distinct contradiction by the histological appearances, render the discussion of this idea unnecessary.

Dr. Goodfellow‡ considered the cysts to be spaces formed in the fibrous structures of the kidney, which become filled with serous contents. If this were so they should be irregular in shape, whereas they are primarily round or oval.

The other opinions that have been advanced regarding this disease, all depend on the theory of obstruction of the tubuli and their subsequent distension. Different observers attribute the obstruction to different causes. According to some of them cystic degeneration of the kidney is to be regarded as an exaggeration of the ordinary cystic condition of granular kidney, but if these two conditions are different forms of the same disease, we should expect

* Path. Anat., p. 515.

† Med. Times and Gazette, 1860, Vol. ii., p. 574.

‡ Ibid.

to find the former much more frequently, and also a record of intervening stages between them. There is, besides, an absence of those pathological changes in the body which are typical of the granular kidney, in those cases in which these organs have undergone true cystic degeneration.

The theory that cystic degeneration is due to a "local fibrosis" of the kidney has been advanced by Dr. Windle.* He suggests "that what occurs in this disease, is the formation of an intertubular fibrous tissue, its contraction, strangulation of the tubes in parts, and their consequent dilation." The condition of cystic degeneration, however, does not follow the local fibrosis that injury or contracting gummata might produce, and I cannot see why a "local fibrosis," should produce changes different from those which occur in granular kidney, in which condition these organs are also infiltrated with connective tissue. The fact that Klebs has not found no excess of fibrous tissue in cases examined by him, can be also brought forward as an objection to this view; and it seems to me that where this increase of connective tissue is present, it may be as Ziemssen considers it, "just as well a consequence as a cause of cyst development."†

The obstruction of the tubuli by blood, as the result of hæmaturia following injury, has been advanced as an explanation of the process, mainly on the evidence it appears of one case. If this is an efficient cause of cystic degeneration, we ought to find the latter condition much more frequently than we do; it also entirely fails to account for those cases in which we have reason to believe that hæmaturia has not occurred at all, or only at a short period prior to death.

* Brit. Med. Jour., 83, i., 1177

† Ziemssen Cyclop., Vol. xv., p. 643.

The obstruction of the tubuli by epithelium or casts has also been suggested. Mr. Simon* advances this theory in a somewhat modified form in the following words: "certain diseases of the kidney," he says, "tend to produce a blocking of the tubes; that this obstruction produces rupture of the limiting membrane, and that then what should have been an intratubular cell-growth continues with certain modifications as a parenchymic development." Against this theory, or any other that advances obstruction of the tubuli as the essential cause of cystic degeneration, the following objection can be raised:—the cysts under these conditions should be retention cysts, and should contain urea and other urinary ingredients; these have been shown to be absent in any but the smallest cysts, and even in these Virchow denies their existence. Again, obstruction of a glandular duct, from the analogy of other organs, should be eventually followed by atrophy of its epithelium, not by a continued cell proliferation, and subsequent degeneration, which seems to be the only hypothesis capable of accounting for the chemical contents of the cysts. There are also difficulties involved in regarding any inflammation of the kidney, either acute or chronic, as a necessary antecedent of the disease. The absence of casts, that has been noted in most of the more carefully reported cases, even when hæmaturia and albuminuria were present, and the occasional absence of these latter symptoms up to the time of death, it seems to me are, conclusive proofs of the impossibility of attributing the disease to any acute form of nephritis; these facts are also of some considerable value in disproving the causation of the disease by chronic inflammation.

There still remains one theory that suggests itself to

* Med. Chir. Trans. Vol. xxv., p. 152.

my mind as a more plausible one, and which I find has been briefly suggested by Dr. Goodhart :* namely, that cystic degeneration of the kidney must be regarded as an adenoma of that organ. All observers seem agreed that the cysts are lined with epithelium ; if so, it must be epithelium derived from the urinary tubules. Groups of cells undergoing colloid degeneration have been observed in the cysts ; there are, apparently, some also in a section that I have taken from a case I saw at the Birmingham General Hospital. The contents of the cysts, regarded chemically, as has been already pointed out, seem to be the products of degenerated cells ; if this is so, they are derived from the degeneration of epithelial cells, for there is no evidence histologically of this change taking place in the connective tissue.

Before proceeding further in the description of this theory perhaps it may be well to allude to the occurrence of cysts in the liver in some of these cases ; this fact is recorded in four instances.† On comparing the description of these cysts with the description of adenoma of the liver in Ziegler's pathology,‡ I cannot find any material points of difference.

The following is a description of the process which I imagine leads to the pathological condition we find in cystic kidneys. The epithelium of the kidneys, as the result of some abnormal irritation acting, in the adult through the blood, (for the universal affection of both kidneys points to this), in the foetus through some error of developement, acquires a tendency to proliferation. Whether this epithelial proliferation takes place within the tubules, as seems to occur in cystic disease of the

* Brit. Med. Jour., Jan. 1884. p 51.

† *Le Progrès Méd.*, 1883, p. 228. *Rayer*, Vol. iii., p. 331. *Trans. Path. Soc.* Vol. iii., p. 220.

‡ *Ch. Ziegler*, Sec. i., and viii., p. 329 ; and *Tr. Path. Soc.*, Vol. iii., p. 221.

testicle, or whether it arises in the same way as an adenocystomata of the ovary, by an involution of the epithelial lining, the shutting off of this involved portion from its original source and its subsequent development into a cyst, will be difficult to determine. I do not see how the latter process could be ever positively demonstrated in the kidney, where the epithelial tubules are so closely packed that any involution from one must of necessity encroach on the calibre of another. The proof or elimination of either of these methods would not, I think, weaken this theory of the origin of the disease, for both processes are essentially adenomatous. The proliferation of cells seems to me, from an examination of sections, to spread mainly in a circular manner; the central cells becoming separated from their blood supply undergo colloid degeneration; the cells at the periphery at the same time multiply and so cause a gradual enlargement of what is now a cyst; this cyst by pressing on, or irritating neighbouring structures becomes invested with a layer of fibrous tissue (this increase of connective tissue in proportion to the size of the cysts is well marked in sections I have examined; round the smaller cysts or groups of cells I can find no definite layer). As a result of this process originating in different portions of the kidney, more especially it seems in the cortical portion, there results the collection of cysts we find in this disease. The question as to whether the process commences in the malphigian capsules or in the convoluted tubules, or in both simultaneously seems to me one of no great importance.

The occasional occurrence of cysts in the liver seems, if anything, to lend support to this view of the origin of the disease; reasons for regarding them also as of adenomatous origin have been pointed out. Presuming, for the sake of argument that they are so, it does not

seem difficult to imagine, considering the close physiological relations of the liver and kidney, that they both arise, as the result of some common irritation acting through the blood.

It is interesting also to notice that the ovary, parovarium, testicle, and kidney, all organs developed from the Wolffian body are occasionally affected with cystic degeneration. These affections of the ovary and testicle are now regarded by pathologists as being adenomata. Does not this give some support to the view I have taken of cystic disease of the kidney? The occurrence also of a case in which there was cystic disease of both kidneys and one ovary,* is also, I think, evidence of the same kind.

On the above grounds, I would maintain that "cystic degeneration of the kidneys" should be regarded as an adenoma of that organ.

* Rayer, Vol. iii., p. 534.

NOTES ON ASTHMA.*

BY ROBERT SAUNDBY, M.D.,

MEMBER OF THE ROYAL COLLEGE OF PHYSICIANS,

ASSISTANT PHYSICIAN TO THE GENERAL HOSPITAL, BIRMINGHAM.

IT is to be regretted that the term Asthma is not always restricted to that form of paroxysmal dyspnœa which, not being associated with any organic changes in the thoracic organs, has been rightly ascribed to nervous influences. It is to this form of asthma alone that I intend to allude in the present paper. Its prominent clinical features have been graphically portrayed by Trousseau; "an individual in perfect health goes to bed feeling as well as usual, and drops off quietly to sleep, but after an hour or two he is suddenly awakened by a most distressing attack of dyspnœa. He feels as though his chest were constricted and compressed, and has a sense of considerable distress; he breathes with difficulty, and his inspiration is accompanied by a laryngo-tracheal whistling sound. The dyspnœa and sense of anxiety increasing, he sits up, rests on his hands, with his arms put back, while his face is turgid, occasionally livid, red, or bluish, his eyes prominent, and his skin bedewed with perspiration. He is soon obliged to jump off his bed, and if the room in which he sleeps be not very lofty, he hastens to throw open his window in search of air. Fresh air, playing freely about him, relieves him. Yet the fit lasts one or two hours or more, and then terminates. The face recovers its natural complexion and ceases to be turgid. The urine which was at first clear and passed rather frequently, now diminishes in quantity, becomes redder, and sometimes deposits

* Read before the Midland Medical Society.

a sediment. At last the patient lies down and again falls off to sleep." But these attacks are not always so transient; there are frequently some prodromata, such as a feeling of tightness at the chest for some time previous to an attack, and still more frequently there is difficulty of breathing on the following day, with perhaps cough and mucous expectoration. This consecutive bronchial catarrh tends to increase, and the subjects of it often acquire a definite degree of bronchitis which may continue, especially in the winter, and is liable to be aggravated from time to time by fresh paroxysms; the following is a case in point:—H. H., aged 40, at first suffered from asthma only during the months of July and August, but during the last few years he has been liable to attacks all the year round. He has recently suffered from a good deal of bronchitis in the winter.

Such cases present the appearance of ordinary chronic bronchitis, and unless the history is enquired into, the asthma would be considered to be the result of this. Such a mistake would be very unfortunate, as by overlooking the nervous element in the case, we run the risk of omitting that part of the treatment most likely to be effectual in relieving the patient's sufferings. But in typical cases the attacks present all the characteristics of a neurosis. They occur in a person in otherwise good health, and pass off in a few hours without leaving anything but the recollection of the disturbance behind. During the paroxysm, physical examination fails to detect any sufficient cause for the dyspnœa in the lungs themselves into which air enters freely. The true hindrance to the respiratory act is in the impossibility of expiration. The muscles of inspiration, especially the diaphragm, are spasmodically contracted, and it appears to be now satisfactorily decided that this phenomenon is

the true cause of the asthmatic paroxysm. We owe this discovery to Riegel of Cologne, the author of the article on Bronchial Asthma in Ziemssen's *Cyclopædia*. In a recent communication* he has shown that the occurrence of the paroxysm depends entirely on the influence of the phrenic nerves, which supply the diaphragm. While he confirms the statements of Williams, Paul Bert, and others, who induced convulsive dyspnœa in dogs by stimulating the vagus, he shows that when both vagi are divided the paroxysms may be produced by stimulating their centrifugal ends, while if the phrenics are divided the occurrence of the paroxysm is entirely prevented.

This serves to finally sweep away the old and always unsatisfactory theory that the dyspnœa was caused by contraction of the circular muscular fibres of the bronchi; a theory which never sufficed to explain the clinical phenomena, or corresponded with known pathological data.

The mechanism of the paroxysm being clearly established, we are quite able to see how any irritant acting upon the surface of the respiratory mucous membrane may determine an attack, but it is still impossible to define the peculiar forms of irritation that can produce this disorder, still less to detect the constitutional predisposition which renders persons liable to it. For it must be at once admitted that all people who inhale hay pollen do not get hay asthma, nor do ipecacuanha powder, or ordinary dust cause such attacks in persons generally, as in some specially susceptible individuals. Among the more remarkable and less common causes are the odour of flowers, Trousseau himself being susceptible to the smell of violets; and the odour of animals, especially cats! Instances of even these

* *Zeitschr. f. Klin. Med.* Bd. v. p. 413.

rarer forms are probably within your experience. The constitutional predisposition was connected by Trousseau with gout, yet in only one of many cases of which I have notes, is there any history of this disease. Undoubtedly the predisposition is transmitted by descent, but owing to the loose way in which the word "asthma" is used by the public we cannot attach much importance to statements to this effect made by our patients, unless they show clearly that they understand and appreciate the word in the narrow sense in which we should employ it. For my own part, I am inclined to regard asthma as one of the rarer and major manifestations of the neurotic temperament; and I believe that it is a disorder which is yearly increasing in frequency.

Recently, I saw a young woman who came complaining of a persistent cold in the head, violent coryza, sneezing, and slight cough. In course of conversation, I found she had asthmatic paroxysms at night, though from the slight degree of prominence given them by her in her complaints to me, we may infer that they were not very severe. Her father had suffered from "hay fever" and gout, while a paternal aunt was subject to true asthma. The exciting cause in this case appeared to be the dust from furs amongst which she was employed.

This association of coryza with asthma is most commonly seen in hay fever. There as you know the most common manifestation resembles a severe cold in the head, and the asthmatic paroxysm occurs less commonly. Doubtless both cases owe their origin to the same cause, the action of some irritant upon specially sensitive mucous surfaces. Trousseau supposed this form of coryza to be a minor manifestation of the asthmatic tendency, a sort of *petit mal*, in the subjects of which you might anticipate sooner or later, the occurrence

of the major attack. Dr. Morell Mackenzie has recently drawn attention to a form of coryza very frequent in America, and which he attributes to the fine white impalpable dust which he says is so constantly present and so little regarded, in the atmosphere of a great part of the United States. Hay fever, also, is so common in the same country, that there exists an American Hay Fever Association, made up of sufferers from this complaint, which meets annually to compare therapeutic observations.

Some observations of my own appear to me to throw some light upon this point. I have met with several instances of this liability to severe coryza, apart from the effects of external cold, and the subjects were in every case neurotic dyspeptic persons. Now this type is, we are told, most widely spread throughout the United States, so that indeed neurasthenia is called the American disease.

I am therefore inclined to believe that the liability to this form of coryza is one of the expressions of neurasthenia, and that given the presence of this condition, the exciting causes are numerous and almost omnipresent; doubtless the dust referred to by Dr. Morell Mackenzie being one.

As neurasthenia is undoubtedly on the increase in this country, these considerations are not unimportant. I fear, from what I see in practice, that it is a disease not generally recognised, and with which there is too little sympathy. It is not sufficiently known that the most eminent persons are the most prone to this condition; that we find it specially amongst our intellectual classes, our statesmen, authors, teachers and the like. Such men have usually done far more than their share of work of all kinds, and have been the very life of the organisations with which they have been connected.

One of my most recent examples was a working man, a teacher in the Severn Street Schools, vice-president of his ward committee, many years its secretary, and foreman in his factory; a man who, left early an orphan, had obtained his education at the Severn Street Schools, and had worked his way up to the highest rank in his own class. Surely such men deserve something better from the profession than to be relegated to the class of incurable chronic dyspepsias, and drugged alternately with bromide of potassium and rhubarb and soda, as brain or stomach respectively show signs of distress. I have spent too much time already to discuss the treatment of such cases at length, but their recognition is after all the essential factor. Given such a case, every rational practitioner will see his way to devising a mode of life by which the sufferer may bring his work, diet, and exercise within the limits of a nervous system, weakened by excessive and constant use.

Climate, season, and locality play an important though obscure part in determining the incidence of asthmatic attacks. The hay-pollen theory explains the cases which are better in the town than in the country, and in the winter than in summer; but it does not explain the cases in which the reverse of this is true, or such examples as that of the twin brothers mentioned by Trousseau, who, being natives of Marseilles, could not live there on account of their asthma, yet got rid of it easily by crossing to Toulon, and never suffered from it in Paris. I know a lad who spends part of his time every year at four different houses; at two of these, in London and Wales, he is liable to attacks, while at the other two he is always free. Low-lying localities seem generally unfavourable to asthmatics, but nothing is more capricious than this disorder, exactly opposite conditions apparently suiting different cases; the

city suits one, the country another ; winter brings relief to this sufferer, summer to that one ; fog and smoke confine one man to his bedroom, while to another they are indifferent, and to a third smoke may be positively beneficial.

The *intervals* during which the sufferer enjoys immunity from the attacks of his enemy vary very much. In some the paroxysms occur every night, in others at intervals of a few weeks, sometimes months may intervene. One of my patients went for two years free from an attack, without being able to assign any cause for the respite. These peculiarities are strictly parallel to the capriciousness in other respects already alluded to ; and like them cannot receive at present any satisfactory explanation.

Is there any drug that wards off the attacks? This is a very important question, and one which I have set myself to answer. Belladonna, arsenic, lobelia, and *iodide of potassium*, have each found their supporters. I have given a sufficient trial to all of these, and the only one in which I have any confidence is iodide of potassium. Its value in this disorder has been long known, but it is not so generally appreciated as it should be. This may partly be because the dose required is large, ten grains three times a day, or the same amount in two doses of fifteen grains each. Another drug, which certainly appears to be of use, is *sulphur*, the *balsamum pectoris* of the celebrated Hoffmann. This may be given in doses of ten or twenty grains in syrup or honey, once or twice daily.

The importance of counter irritation, well insisted upon by that distinguished clinician Dr. Graves, must not be overlooked. Graves recommended the application of the linimentum terebinthinæ aceticum, or St. John Long's liniment as it was then called, to the nape of the neck and the upper part of the chest and back. Some years

ago I was struck by the results recorded by an American physician, Dr. Faulkner, from the use of pigmentum iodi painted over the course of the pneumogastric nerves. In several cases I have seen this plan of essential service, and can recommend it though it has not proved in my hands a radical means of cure. The man H. H. who was suffering very much from dyspnœa when he came to me, was ordered to use the iodine paint that evening, and reported to me afterwards that he had slept all night for the first time for twelve months.*

As to the *modus operandi* of this procedure, we may conceive that vigorous stimulation in the cervical region would be very likely to have some effect upon the phrenic nerve; and if we accept the most recent views, that the spasm is mainly due to contraction of the diaphragm under the influence of this nerve, counter-irritation, not necessarily "in the course of the pneumogastric," but in that region, or in the nape of the neck, as Graves suggested, seems a very rational, and proves a very satisfactory method of treating this disorder.

When there is persistent *dyspnœa*, some *bronchitis* and *cough*, a cough mixture must be given, and to the ordinary mixture of squill, senega, and ipecacuanha, I would recommend the addition of fifteen drops of the fluid extract of *Grindelia Robusta* (a species of sunflower). This is one of the new American remedies which has fairly stood the test of experience and has proved a valuable means of relieving dyspnœa.

The value of inhalations of stramonium, nitre, tobacco, etc., has been perfectly well established, and these sufferers are in the habit of seeking such remedies without con-

* Cases showing benefit from this method were published by Dr. Marshall of Nottingham, Brit. Med. Journal, 1881, Vol. i., p. 13; and by myself, Ibid., 1880, Vol. ii., p. 808; 1881, Vol. i., p. 48.

sulting us. Various articles, cigarettes and pastilles, are commonly advertised. Dr. Sawyer, some little time ago, asked Messrs. Southall to analyse one of the most popular forms of these latter, and they reported it to contain approximately one part each of powdered aniseed and potassium nitrate, and two parts of powdered stramonium leaves.

The hypodermic injection of morphia is strongly recommended by Dr. Steavenson, himself a sufferer from asthma, as the most effectual means of relief during the paroxysm.

One of my patients who was no doubt dyspeptic, found a great deal of relief from the occasional use of an emetic, while another of his plans for treating himself was to abstain from food entirely for twenty-four hours.

Constipation may be present, and we may take it as a rule that torpor of the bowels always acts prejudicially on the respiratory tract. I do not think in the present day quite sufficient attention is paid to the value of purgatives in the treatment of disease. It often happens that otherwise well considered treatment fails for want of an associated purge, and in a great many conditions, as in chlorosis, purgation is an absolute essential to the success of the specific remedy employed. Moreover, we leave this matter too much in the hands of our patients and think any laxative will do. This is another very serious mistake; any laxative will not do. Each condition has its appropriate laxative, and in the one we are at present considering sulphur, otherwise indicated, is the most appropriate. It may be conveniently given in the form of a confection with a little compound jalap powder.

AN ADDRESS ON SANITATION IN SOME OF ITS ASPECTS, MORAL AS WELL AS GENERAL.

DELIVERED AT THE ANNUAL MEETING OF THE BIRMINGHAM AND
MIDLAND COUNTIES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

BY JOHN J. NASON, M.B., J.P., PRESIDENT.

(Continued from page 70.)

I would recommend the establishment of a mutual good understanding between the medical man and the parent or master, as the case may be ; and when this has been done, and the two are acting in concert with one another, and when, in addition to this, a kindly sympathetic attitude is observed (for without this, little real advantage will be gained), there ought to be no difficulty in winning confidence, and gaining the first great step towards moral reformation—viz., an acknowledgment of the offence.*

An old father† has wisely said that "*A temptation disclosed is half conquered*;" and this is more especially true of boys who have been brought up with decent moral training.

And when this disclosure has taken place, and the boy's conscience has been quickened, the medical

* The importance of establishing a good mutual understanding between the medical man and the parent or teacher is not lessened by the fact that it presupposes the existence of ordinary wisdom and discretion in those who would act upon it. I have no wish to encourage my medical brethren to be officious, or needlessly to meddle in matters which do not concern them. This would be sure to bring discredit on the profession, and would give rise to mischievous results which would be but poorly compensated for by the little amount of good which would be done.

† S. Philip Neri.

attendant will be able by wise advice and judicious treatment, added to a little diligent care for a time, so to strengthen his patient's moral principles, and build up the enfeebled nervous power, as to earn the lasting gratitude of the future strong and healthy man.

Upon the inculcation of the principles I have already laid down—viz., those which engender early habits of continence, I should be disposed to rely to a very large extent, and indeed more so than to any other remedy, for the preservation of the rising generation from those temptations which are sure to beset their riper years, and which, unless resisted, will have a deteriorating effect on their moral and physical beings, and will expose them to the danger of inoculation with a disease which the resources of medical science may be able somewhat to mitigate, but never utterly to eradicate.

The habit of continence, early established, will make the practice of it in after years a comparatively easy thing; whereas the early and unrestrained indulgence of the passions will bring about such nervous irritation and constitutional unrest—not to mention great instability of purpose and diminished powers of self-control—as will lead the unhappy sufferer to seek relief in unlawful and perilous expedients, which will, like dram-drinking, not only feed the disease they were intended to remove, but also, in themselves, become the parent of other ills, far more difficult to bear than the salutary rule of self-restraint.

Thus far, gentlemen, acting on the principle that "prevention is better than cure," I have dealt with the duty and importance of employing moral agents as a means of suppressing vice, and of protecting the health of the people from those evils which are the more or less direct outcome of bad habits.

But inasmuch as these agents, however earnestly and zealously employed, are not sufficient, in themselves, to accomplish all that lies within our power, I must now proceed to speak—and that briefly—of those legislative measures which are more immediately required for the control of those with whom moral arguments carry little or no weight; and as a means of checking that dire disease—syphilis—which is, more than any other disease, undermining the human constitution in this and other countries.

The Legislature has been moved, at different times and in various ways, to enact laws mainly for the repression of the two vices we have been speaking of; and the results have not always realised the expectations of those through whose instrumentality they were procured. This is not to be wondered at. The Acts were but means to an end. They may have been imperfect in conception, or faulty in operation: or again, they may have been wrongly carried out. Moreover, the saying is true, that you cannot make men good, sober, honest, or virtuous, by Act of Parliament. At the same time, the Legislature is bound to do what it can with a view both to the suppression of vice and the encouragement of virtue; and Acts of Parliament, based on principles of truth and justice, even though they fail to accomplish all that we could wish or expect, will help, in a large degree, to bring about those much-to-be desired ends.

Of the measures which have been before Parliament (one of which indeed was, for a time, made law), I would allude to the "Contagious Diseases Act" and the "Criminal Law Amendment Act."

If, as is contended by many estimable persons, the 'Contagious Diseases Acts' were not based on principles of morality—an opinion in which I have not been able to share—not a word can be said against their repeal.

That they were capable of abuse, and of exposing virtuous women to the danger and shame of arrest, was enough to account for the strong feeling of antagonism which they awakened ; but, notwithstanding this, I am of opinion that some such legislation is urgently needed ; and I would express my earnest hope that the said Acts may be re-adopted, ere long, in an amended form, which will entirely obviate the moral difficulty I have alluded to, and, at the same time, not impair their efficiency in diminishing the evils against which they were directed.

“ These Acts were undoubtedly reformatory, and worked favourably alike in the interests of health and morality ;” and those who go at all fully into the matter, and approach its consideration without prejudice, can prove that both these excellent results were obtained. In proof of this, we have “ the statement hitherto, I believe, uncontradicted, that of the patients received into the Royal Albert Hospital, 45 per cent. were induced to refrain from returning to a vicious life.”*

“ In those towns where the Acts were in force, the reports of the clergy, sisters of mercy, medical men, magistrates, naval and military officers, were in favour of the benefits conferred by them, and the following table, taken from the Report of Convocation on the subject, although it does not give the percentage of women reclaimed, serves to show otherwise the working of these Acts in Portsmouth :—

	1866.	1876.
1. Prostitutes . . .	789	497
2. Per cent. diseased . .	70	4'84
3. Brothels . . .	253	133
4. Private houses . . .	150	115

“ The reformatory side of the question has not been

* Is it Nothing to You? By the Rev. Henry Rowley.

fully and fairly recognised by those even who have pleaded the sanitary side." "Without compulsion in some form or other, there can be no repression of this disease, and without moral reforms compulsion would not be tolerated."*

It is, unquestionably, the duty of the State to take action against any disease which ravages the community—let it proceed from what cause it may—and so long as its legislation is based on principles which are in harmony with those of true civil freedom and the highest morality, it cannot fail, in the long run, to win the consent of public opinion, let the popular outcry, at the time, be what it may.

The "Criminal Law Amendment Bill," which passed through the House of Lords, but failed, through want of time, to get through the Commons last year, is a very hopeful measure, and its passage into law is devoutly to be wished.

By inflicting penalties on those who procure, or endeavour to procure, women for an immoral life, or who by false pretences, representations, or other fraudulent means, are the cause of corrupting women under 21 years of age, it provides a remedy for one great crying evil, which, if rigidly applied, cannot fail to serve as a deterrent to those who take part in this iniquitous trade. By repealing the present law, which requires that the person or persons solicited in the streets shall themselves prefer the charge, and transferring this responsibility into the hands of the police, it will do much to clear our streets in the metropolitan district, of this intolerable nuisance, and abominable temptation, which is the cause of the ruin of many who would, otherwise, have been kept in the paths of virtue. By making brothel-keeping much more difficult than it now is, and by providing punishment

* Brit. Med. Journal, July 7th, 1883, p. 27.

for those who defile young girls between the ages of twelve and sixteen (I would it were seventeen), even with their consent; and also by providing certified homes for girls under sixteen years of age who have been convicted of this offence, and who have no proper guardianship, it will have a salutary effect in discouraging vice, and diminishing the spread of disease.

I cannot enter more fully now into the particulars of this Bill; but I look forward to its becoming law with much satisfaction, not merely because of the good it is likely to do, but as a hopeful sign that public opinion is resolved to make prostitution less aggressive than it now is.

I cannot dismiss the subject of legislative interference for the two-fold purpose of suppressing vice and eradicating disease, without throwing out the suggestion that it might be well for our "Parliamentary Bills Committee" to take this matter in hand, and to consider it part of their duty to advocate and press forward any well-devised measures which may be set on foot, with this object in view.

Gentlemen, I must now proceed to bring these already too-lengthy remarks to a close. My aim has been to set before you some part of the great subject of Sanitation, both in its general and in its moral application; and, in so doing, I have sought to elucidate the duties and responsibilities, in respect to this subject, which belong to us in our professional capacity.

Our physical and moral natures are so interwoven, and so dependent on each other for that healthy tone and vigour without which the complex machinery of our being cannot preserve its just balance and equilibrium, that no wise or thoughtful physician or surgeon, who regards the individual man as something more than an animal, or who

considers the relation in which he necessarily stands to the community at large, and the effect which his condition of health or disease must, of necessity, have on the body corporate, can do right in systematically ignoring or neglecting the moral faculties, in his efforts to promote the physical well-being of his patients.

The words of Macbeth—

“Canst thou not minister to a mind diseased ?”—

—are a reproach which we can never allow to be hurled at us ; for, considering how mind and matter act and react on one another, we are bound, in the treatment of disease, to regard man's nature as a whole ; and, in endeavouring to build up and, as it were, re-adjust his impaired and shattered forces—whether moral or physical, or both—to do so in such a manner as will enable him, so far as lies in our power, to fulfil the purpose of his creation, and to be a blessing to society at large.

Gentlemen, my distinguished predecessor, in his able address last year, deplored our want of political power, and I fully share his feeling of regret that our voice is not more heard, and our influence felt in the great council of the nation. But I have endeavoured to show you that we are in possession of a more important power than this ; and that if we resolve to put forth our moral strength, and to use it rightly, we can exercise an influence for good upon public opinion, and upon society generally—an influence which no political disability can ever diminish.

Let us be true, gentlemen, to the best instincts of our nature, and loyal to all that can add lustre to the dignity and fame of our noble profession ; let us be diligent workers at the “healing art,” loving it and devoting ourselves to it—not merely for our own personal benefit, or for the good it confers on others, but also for its own sake as a branch of science ; let us be willing and

anxious to cast on one side the errors of the past, as the advancing light of physiology, pathology, and therapeutics, makes known to us the more perfect ways of health; and, above all, let us in our own personal characters, be men of the strictest integrity, in whom the confidence of the public can never be misplaced—men, to whom power may be safely entrusted, because power is to them a sacred trust: and then I venture to predict that our profession will not only continue to hold its own in society, but will steadily and surely rise in public estimation, until the anomalies which too much characterise the present time are removed, and all that we can justly claim in the way of privilege or position, has been willingly accorded to us by a grateful and enlightened people.

REVIEWS.

A TREATISE ON BRIGHT'S DISEASE OF THE KIDNEYS.*

DR. MILLARD is well known as a physician practising in New York, and giving special attention to the study of renal disorders. Several able articles in this branch of medicine have appeared from his pen, so that we were fully prepared to receive from him a monograph on Bright's disease.

The prevalent fault in modern medical books is to be too scientific; and to pad out the meagre clinical information at the author's disposal with lengthy accounts of the chemical, physiological, and anatomical facts respecting the organ whose diseases the author pretends to discuss. To judge by a great number of the books now written,

* A Treatise on Bright's Disease of the Kidneys. By Henry B. Millard, M.D., A.M. London: Sampson Low, Marston, Searle, and Rivington.

clinical medicine appears to be a most unpopular subject, or one that is very little studied. Yet after all it is clinical work that gives value to all research in the subordinate departments of medical study, and it should be remembered, that of all that is being written now, it is only clinical work that any body will care to read when this generation shall have passed away.

Such reflections are not inappropriate to the present volume. Dr. Millard is a disciple of Prof. Heitzmann of New York, who, as is well known, holds peculiar views on histology, and ignores all work done outside his own laboratory. Hence we are not surprised that Dr. Millard is anxious to add a few more to the already too numerous synonyms by which the identity of the various pathological varieties of Bright's disease is now obscured, *e.g.*, tubal, or parenchymatous nephritis he calls croupous nephritis, while to the interstitial form he prefers to apply the term "catarrhal" nephritis; but these innovations are not productive of any great addition to the extent or the accuracy of our knowledge of these conditions.

The ground for the new title "croupous" is, that according to Dr. Millard, the epithelium undergoes a hyaline change in consequence of death of the living reticulum, which Heitzmann and his followers regard as the seat of all vital phenomena. The epithelium so altered forms casts. This colloid or hyaline change in the epithelium forming casts was pointed out by Langhans five or six years ago, and has lately been recognised as a widely diffused occurrence, especially common in inflammatory processes, a fact for the knowledge of which we are mainly indebted to Weigert. On the other hand Virchow is credited, whether rightly or not we cannot say, with having first applied the term "catarrhal" to the form of inflammation which leads to the small red kidney, and which, "according to Heitzmann, consists in œdematous infiltration of the connective tissue, causing striation of the swelled cortical substance." We do not understand what "striation" exactly means, but the œdematous infiltration is an important fact, though surely not the alpha and omega of the lesion.

Dr. Millard makes no attempt at a clinical description of any of the types of Bright's disease. He contents himself with a bald list of symptoms, and some information as to their relative frequency which, by-the-bye,

is not always correct and sometimes contradictory, while the statements are much lacking in definiteness. Thus it is not true that dropsy is always present in the large white kidney, it is absent in about one case in twelve; it is also not true that the heart is always hypertrophied in the small red kidney, or that it is never hypertrophied in the other forms, a statement which Dr. Millard quotes from Dickinson without correction, although he knows better, as elsewhere he speaks of the rapid enlargement of the heart in acute nephritis, especially in children.

He rightly attaches very great importance to the results of microscopical examination of the urine, though we cannot go entirely with him in his belief in the possibility of always identifying renal epithelium from epithelium from other parts of the urinary tract, but we are heartily at one with him in his main position, that the microscope is the principal instrument in the diagnosis of nephritic disorders.

The chapters on treatment are very full, and almost all known remedies are referred to; but Dr. Millard, personally, prefers calomel and corrosive sublimate, given in homœopathic doses of 10 grains of a 10,000th trituration. We believe Dr. Millard is considered quite orthodox in America; but he tells us that "the experience of medical men, of acknowledged experience and ability, is rapidly tending to show that very minute doses of medicine accomplish, in numerous conditions, more than ponderous or even moderate doses." This is rather hard on the homœopaths, who have recently abandoned infinitesimal doses under the pressure of universal ridicule and incredulity.

VIVISECTION.*

THIS is a well meant but not very powerful defence of vivisection, written by a layman.

* Vivisection, in its scientific, religious, and moral aspects, by E. D. Girdleson, B.A. London: Simpkin, Marshall, and Co. Clifton: J. Baker and Son, 1884.

THE LIVERPOOL MEDICO-CHIRURGICAL JOURNAL.*

THIS bulky half-yearly volume fully maintains its reputation, and affords abundant evidence of the skill and learning of the Liverpool faculty. The work of the new Women's Hospital is not unworthily represented by an account of some successful cases of removal of the uterine appendages by Dr. Imlach. Mr. Reginald Harrison has an excellent paper on some "Rare diseases of the bladder." Dr. Caton's paper on "Pneumonia" is an honest contribution to the subject now engaging the attention of the Collective Investigation Committee. There is an excellent pathological paper by Dr. Greves, on "Acute yellow atrophy of the liver in children." Dr. Archer relates a case of enteric fever in which kairin obviously exercised very marked antipyretic effects; and Dr. Cameron sends a case of bronchocele, successfully treated by hydrofluoric acid of half per cent. strength, commencing with ten minims per dose. Dr. F. T. Roberts, of London, contributes a common sense paper on the "Local treatment of diseases of the respiratory organs," which anyone may read with advantage. We have not space to give a full account of the contents, and have only mentioned here such of the papers as had most to interest us.

ON THE ORIGIN OF ANÆMIC MURMURS.†

DR. FOWLER draws attention to the diminution in the total volume of the blood in amæmia, which he asserts on the authority of Zimmermann, the author of the article on Anæmia in Ziemssen's Cyclopædia; to this he attributes the murmurs heard in the pulmonary artery, aorta, and root of neck, adopting Chauveau's explanation, which indicates that whilst the volume of the blood is diminished, the aorta and pulmonary artery are unable to contract owing to the absence of contractile elements in their coats, while the roots of the innominate veins are

* The Liverpool Medico-Chirurgical Journal. July, 1884. London: H. K. Lewis.

† On the Origin of Anæmic Murmurs. By James Kingston Fowler, M.A., M.D., Cantab., M.R.C.P., &c. London: J. and A. Churchill. 1884.

kept permanently dilated by their attachment to the cervical fascia. He regards the apex murmur as due to mitral regurgitation, and he is unable to admit any hard and fast distinction in the physical signs of organic and functional regurgitation, both murmurs being alike audible posteriorly. He has made a few observations upon the relations of the murmurs to the corpuscular richness and hæmoglobin present in the blood, from which he concludes that the loss of corpuscles has a greater effect in producing murmurs, than the loss of hæmoglobin. The essay does not contain much evidence of original work, but is a fair *résumé* of the subject.

SOME ACCOUNT OF CARDIAC ANEURISMS.*

THIS excellent monograph having already appeared in the medical papers is probably known to most of our readers. It is a summary of our knowledge of this interesting and obscure department of cardiac pathology, which even yet has scarcely effected entrance into clinical medicine. Appended to it is a very full bibliographical list which gives the work a permanent value to future workers in this field. Dr. Legg has little to add to the various conjectures as to the causes of aneurisms of the walls of the ventricles, or rather in explanation of the fibro-myocarditis, to which they are doubtless in many cases due. He regards, justly we think, as unproved, the suggestion that disease of the coronary arteries is the exciting cause of the change

We believe sufficient attention is not paid by pathologists to the latent occurrence of myocarditis in many acute and chronic diseases, *e.g.*, diphtheria, small-pox, Bright's disease, gout. Such a myocarditis frequently clears up, leaving little or no permanent structural alteration; but general or partial fibroid degeneration is by no means an uncommon occurrence. If adhesion takes place on a limited area between the parietal and visceral layers of the pericardium, the evolution of the aneurism is greatly favoured.

* Some Account of Cardiac Aneurisms, being the Bradshawe Lecture, read before the Royal College of Physicians of London, on August 18th, 1883. By J. Wickham Legg, Fellow of the College. London: J. and A. Churchill, 1884.

THE GHEEL LUNATIC COLONY.*

DR. TUCKER has been credentialed by the Government of New South Wales to visit the various institutions and places for the care of the treatment of the insane in the different civilised countries of the world, and in the course of this duty has visited Gheel. His report of this famous colony is very unfavourable. As is well known Gheel is a district of Belgium, which has been for many centuries a place in which lunatics are boarded out with the inhabitants. Situated in the middle of a sandy waste, it affords certain facilities for their isolation from the sane population of the country. Dr. Tucker visited Gheel in December, 1883; he found it a melancholy place, with much mud and many pools of water. The houses generally were old and comfortless. The lunatics were ill-cared for, living under conditions of want of space, ventilation, and occupation, except such menial services as they were in some cases constrained to render. Complaints of coarse food, and even of ill-treatment, were not uncommon. The supervision organised by the State appeared to be defective. The practice of boarding patients in public houses, where they were obliged to sit among the customers, struck him as very strongly open to objection. The patients had no kind of amusement, and he declares that he did not see a single happy face among them. He considers the whole system an anachronism, based on principles entirely at variance with those universally accepted as desirable in the treatment of the insane, and its existence as a humiliating reproach to modern civilisation.

* The Gheel Lunatic Colony. By Dr. G. A. Tucker, Ph.D., F.R.S.L., etc. Birmingham: Cornish Bros. 1884.

MEDICAL NEWS.

SAUNDBY ON THE GLASGOW DISCUSSION ON ALBUMINURIA.—Dr. R. Saundby (Glasgow Med. Jour., June, 1884), makes the following comments on points raised in the recent discussion on albuminuria at Glasgow. He thinks the practical question is not whether the people in whose urine Leube and others have found albumen were really and absolutely healthy—an evidently insoluble problem; but, what is the diagnostic and prognostic value of albuminuria as a guide to the existence of organic changes in the kidneys, either present or impending? He points out that many cases have been recorded which appear to contradict the widely-held opinion that albuminuria indicates a condition which sooner or later tends to organic renal disease, and he relates an interesting example of what was apparently a bad case of albuminuria of adolescence terminating in a complete recovery, which had been maintained for eleven years. He believes it to be high time that the text-books extended the duration of Bright's disease from the "six months to two years" so commonly taught. He has never seen albuminuria in a perfectly healthy person, but he has often seen it where he had the strongest reasons for believing that it was not dependent upon structural disease of the kidneys. If those who carp at the phrase "physiological albuminuria" are satisfied with the presence of anæmia or dyspepsia as an explanation of the albuminuria, they appear to miss the whole point worth contending for, which is the relation of albuminuria to structural kidney disease. He thinks this grave diagnostic significance does not exist, and that in all cases the microscope must determine the state of the kidneys, by the existence, character, and number of the tube-casts.

In testing for albumen, he rejects the new methods as fallacious, recommending the use of heat and acetic acid with the following precautions. The urine should be that passed after breakfast; it must be clear, and if necessary, should be filtered, with or without previous addition of sodium chloride, or magnesium sulphate. Putrid urine is

unfit for accurate examination. Fill a test-tube two-thirds full of urine, and boil the upper half. *It must be well boiled, not merely heated to boiling point.* Acidulate with a few drops of *dilute* acetic acid. Hold the tube against a shaded background, with the light falling from above, when the faintest haze may be detected by contrast with the clear fluid below. In a bad light, or by artificial light, the detection of a faint haze with certainty is impossible.

The proteid detected by this method is serum albumen or paraglobulin. He does not think from experiments he has made that either oxalate of lime or mucin constitute practical sources of fallacy. He admits that picric acid is a test of delicacy and convenience, and may be used with knowledge of its sources of fallacy; but he thinks the heat test as he has described it should be generally adopted by the profession for ordinary clinical purposes.—London Medical Record.

HERPES AND HERPES ZOSTER.—A number of papers on herpes and herpes zoster have recently appeared. Dr. Paul Fabre has published a volume of two hundred and fifty pages on herpes zoster, in which a very complete abstract of the present state of our knowledge on this subject is given. He gives notes of forty-one cases coming under his personal observation. Fabre defines herpes zoster as "an eruption arranged in patches of various number, shape, and size, separated by intervals of healthy skin, and seated along the course of a nerve." He prefers not to define the eruption, because, as he says, it varies so greatly in different cases and at different periods. He considers the erythematous patch as the essential lesion because it is always present, though vesicles may or may not appear in the course of the disease. Fabre divides the double zoster into—1, those which are complete and symmetrical, forming a girdle; 2, those which are multiple but not symmetrical; and 3, bifid zoster, when several branches or nerves are simultaneously affected, as when the eruption is found over the scapular region, on the chest, and down the arms. In reality, however, these all proceed from one root. The chief interest of the work lies in the notes of cases reported and referred to, as, for instance, those which go to prove the existence of a lingual and guttural form. Herpes buccalis, labialis, progenitalis, are not included under the head of herpes zoster by Dr. Fabre.

Fabre has studied the etiology of zoster very carefully. He shows that it occurs in both sexes and at all periods of life alike. The causes actually known to produce herpes zoster are cold, neuralgia, moral impressions, traumatism, and tumours which may irritate or compress a nerve. As to symptomatology, he goes extensively into this branch of the subject, and gives many interesting cases coming under his own personal observation. In one of Fabre's cases a patient affected with abdominal herpes zoster suffered painful cramps and true clonic convulsions in the sacro-lumbar muscles and in the right anterior portion of the abdomen, while another suffered paralysis of the deltoid, which was ameliorated on the outbreak of the eruption. In adults pain causing insomnia is not infrequent, while in children pain is unusual. Fabre describes three varieties of zoster: 1, the acute febrile form (which has sometimes caused authors to describe zoster as an exanthematic fever); 2, a subacute or apyretic form,—the common variety; 3, a chronic variety, excessively rare, and, in fact, probably a form of recurrent zoster, of which, as is known, only half a dozen examples have been described. Want of space prevents a further *résumé* of this interesting work, a tolerably full analysis of which will be found in the *Annales de Dermatologie et de Syphiligraphie*, vol. iv., 1883, p. 603. Leloir (*Union Méd.*, 1884, p. 1014) describes a form of herpes which he calls "black herpes." His case was that of a pregnant woman who displayed a bluish patch of disease over the left crista ilii, about two or three inches in diameter, accompanied by fever, and which developed into gangrene. The fever lasted through confinement, which took place a few days later and was followed by a copious eruption of blackish herpetic vesicles upon the lips. The fever continued several days, the patch on the hip meanwhile sloughing,—at the end of which time the patient died in sudden collapse. Leloir considered the herpes in this case as an eruptive fever, and thinks that when the herpetic eruption appears on the lips in pneumonia a similar process is going on in the lung. A curious case of gangrene in connexion with herpes is here called to mind, where herpes phlyctænoides of the face was accompanied by gangrene of the mucous membrane of the mouth and pharynx (Hallopeau and Tuffier, *Union Méd.*, 1880, p. 956). A similar case, except that the buccal lesions did not go

on to gangrene, has recently been reported by an American writer (Polyclinic, April, 1884). Here a violent attack of herpes of the face was accompanied by herpes of the buccal mucous membrane of the tongue. The fact is that herpes, in spite of the amount of attention it has received, has not yet been studied sufficiently, and there are many mysterious cases of the affection, the causation of which remains to be explained.—Philad. Med. Times, April 9, 1884.

REMOVAL OF A CYSTIC SPLEEN.—Mr. Knowsley Thornton removed a cystic spleen, by abdominal section (median incision), at the Samaritan Hospital on Thursday, the 22nd inst. The patient was a single girl, aged nineteen, and the tumour had been growing slowly for two years. Latterly it had increased much more rapidly, and caused much pain. Up to Thursday morning the patient was progressing quite satisfactorily. During the tying of the pedicle the patient suffered severely from shock, and for some minutes her life was in great danger; but she revived immediately the tumour was cut away and the drag taken off the pedicle. The specimen will be shown, and the further progress of the case reported at the Pathological Society.

NEPHRECTOMY AFTER VAGINAL HYSTERECTOMY.—M. Jules Bœckel of Strasbourg has recently read before the Société de Chirurgie of Paris, some notes of a case of total removal of a cancerous uterus by the vaginal orifice. The patient was forty years of age. The cancerous disease was in its earliest stage; the vagina was free from malignant growth. M. Bœckel performed the operation of hysterectomy on October 26th, 1882. He lowered the uterus by means of Museux's forceps, then incised the posterior cul-de-sac of the vagina, and afterwards dissected out the tissues between the uterus and the bladder. A double ligature was then passed round the broad ligaments, and they were divided without the slightest hæmorrhage. The intestines protruded into the vagina, but were easily replaced. Removal of a gland caused slight hæmorrhage, which was arrested by means of two hæmostatic forceps. Sutures were unnecessary, either vaginal or peritoneal, nor were drainage-tubes required. The vagina was disinfected with carbolic solution, and plugged with cotton-wool and iodoform. The following

morning, October 27th, the temperature was 100° Fahr. The two forceps were removed. The general condition of the patient was most satisfactory, but there was an escape of urine into the vagina. An urinary fistula was discovered; it was supposed to result from the pressure of the forceps on the ureter. Nephrectomy was performed, and one kidney was easily removed; it was perfectly healthy. Recovery was rapid. The patient left the hospital six weeks after the first operation, and remained in perfect health during three months, with the exception of polyuria, 1,800 grammes daily. Towards the fourth month, the abdominal glands became cancerous, and the patient died in the seventh month. At the necropsy, parenchymatous nephritis was observed in the remaining kidney; and there was cancerous degeneration of the abdominal glands.

NEPHRECTOMY FOR TUBERCULOUS KIDNEY.—On Saturday, June 21st, Dr. Bantock removed an enlarged tuberculous right kidney from a woman aged 33. A large tumour filled the right side of the abdomen, and the patient's urine had been free from pus. An incision was made in the middle line. The extraction of the kidney proved to be a matter of considerable difficulty, as the capsule was very thick and adherent to surrounding structures, and the glandular substance very soft. The renal artery and vein were plugged, but the vessels passing from the capsule to the gland were much enlarged, and bled freely on division. The ureter was thickened and dilated to an extreme degree; it was divided, and the free surface of the stump was closed by sutures applied to its edges. The dilated calices were filled with a red grumous material, the pelvis contained pus. A drainage tube was passed into the right loin, after removal of the kidney. The patient was progressing favourably on Thursday morning, June 26th.

ALUM IN HÆMATURIA.—A case of severe hæmorrhage from the kidney successfully treated by an unusual remedy, is recorded by Dr. J. S. Radcliffe, in the Philadelphia Medical News for January 12, 1884. The cause of the hæmaturia is left an open question. It is stated that the patient, a lady, aged twenty-five, had suffered from malarial disorders, and that there was a family history of heart disease and rheumatic fever. At the time

of the attack, however, the temperature was but slightly raised, and the heart sounds were normal. Although the hæmaturia came on suddenly, with paroxysmal pain in the right lumbar region and with nausea, it is curious to note that the urine remained bloody for nearly three weeks. During this time, almost all the astringents were tried with no beneficial effect. The patient was first given gallic acid alone, then in various combinations, the acid with quinine, with ergot, with sulphuric acid, with opium. She also took tannic acid, sugar of lead and opium, fluid extract of ergot, infusion of buchu and matico, muriated tincture of iron, and with this quinine; extract of logwood, and extract of hamamelis. Ice was employed internally and externally, and counter irritation, by sinapisms and blisters, was used. The hamamelis appeared to lessen the hæmorrhage slightly, but for the rest, Dr. Radcliffe says "it appeared as if I might as well have given her so much cold water." Rockbridge water was then used on theoretical grounds, champagne-glassful draughts being taken every three hours. Beneficial effects were manifested with the third dose, and on the fourth day the urine was free from blood corpuscles, and on the sixth day it was normal in colour, quantity and quality. It merely remains to add that the Rockbridge alum water appears, from an analysis appended to this paper, to be remarkably rich in aluminium sulphate, and to contain very appreciable quantities of calcium and magnesium sulphates, free sulphuric acid and cilicic acid. It is said to have been employed with benefit in chronic discharges, such as diarrhœa and bronchorrhœa.

ANTIPATHIES.—The celebrated Erasmus, though a native of Rotterdam, had such an aversion to fish, that the smell of it threw him into a fever. Ambroise Paré had a patient who could never see an eel without fainting; and another who would fall into convulsions at the sight of a carp. Joseph Scaliger could never drink milk. Gardan was disgusted at the sight of eggs. A king of Poland and a Secretary of France bled at the nose when they looked at apples. Henry III., of France, had a great aversion to cats, mice, spiders, &c. A great huntsman in Hanover, who would attack a wild boar valiantly, always fainted at the sight of roast pig unless he had time to run away. These antipathies have been humourously accounted for by the doctrine of the transmigration of souls.

Those who had been flies dreaded spiders, those who had been mice avoided cats, &c. Amatus Lusitanus knew a person who fainted whenever he saw a rose. Scaliger mentions a similar case with his and Bayle about honey. Bayle himself turned pale at the sight of watercress. Tycho Brahe fainted at the sight of a fox; Henry III. of France at that of a cat; Marshal D'Albret at a pig. A lady could not endure the feel of silk or satin. A man was known to faint whenever he heard the noise of sweeping. Nicanor swooned when he heard a bagpipe; Bayle fainted at the noise of splashing water.—New York Med. Record.

LITHOTRITY EXTRAORDINARY.—Dr. R. Cran, of Upper Luckimpore, Assam, states that stone is not so rare a disease in Assam as Dr. Partridge thinks. He relates the death of a patient, "after a most peculiar operation, which I shall describe as showing the advanced state of surgery to which they have attained. The priest, having placed the patient on his back, raised well the anterior wall of the abdomen, placed a stone on one side of it, and belaboured the other with a second stone desisting when the calculus was supposed to have been crushed. The patient died a few days after the operation. This was told me by the first man I operated on."—Indian Medical Journal.

NEPHRITIS AFTER VARICELLA.—In a recent number of the *Berliner Klinische Wochenschrift*, Professor Henoch relates briefly four cases which have come under his notice, in which varicella was followed by nephritis. The patients were aged respectively 10, 2, 5, and four years. In all, the eruption of varicella was generally abundant, and was accompanied by fever; and, at the end of a period varying from eight to fourteen days from the appearance of the eruption, there was œdema, with nephritic urine. In three of the cases, recovery took place in a few weeks, under the use of diaphoretics, with Bilin water or acetate of potash as a diuretic. One, a girl aged 2, who was the subject of congenital syphilis, died; and, after death, there were found œdema of the lungs and hypertrophy of the left ventricle. Dr. Henoch has not been able to find any record of varicellar nephritis in medical literature. He regards it as analogous to the nephritis which attends other infectious diseases, especially scarlatina.

HOPPE-SEYLER ON THE FERRIC CHLORIDE REACTION.—Hoppe-Seyler describes a case of poisoning with concentrated sulphuric acid in which, six days after the accident, an acetone-forming substance appeared in the urine, which smelt of acetone, and gave a red colour with ferric chloride. The excretion of acetone lasted with diminishing intensity for four days, during which the patient took scarcely any food. As soon as he could swallow and take food again the acetone disappeared from the urine.—*Zeitschrift für klin. Med.*, VI., p. 478.

THE ALLEGED CASE OF ASIATIC CHOLERA IN BIRMINGHAM.

The daily press is responsible for a *canard* which created a good deal of surprise and some degree of panic, not only in Birmingham, by the announcement of the occurrence of a case of Asiatic Cholera in this town. Careful enquiry has proved beyond reasonable doubt that the case was merely one of severe diarrhœa, the best evidence of this being that, although a week of intensely hot weather followed, no other case occurred. A good deal of comment has naturally occurred upon the diagnosis made by the medical man who saw the case. He gave a certificate of "cholera," followed by "collapse." There is no doubt that he was fully justified by precedents in describing the case as one of cholera, as that term has been in long use for a certain group of symptoms, and is in no way restricted in its application to the epidemic disease of Asiatic origin with which Europe has been visited several times during this century, but which previously was unknown here. Moreover, there is no pathognomonic sign by which we can distinguish between the epidemic Asiatic disease and our home-grown cholera, except by the epidemic character of the former and by its greater malignancy. There is obviously, therefore, room for hesitation in the presence of a single severe case of cholera, but it is most reasonable and probable to regard it as endemic in the absence of direct evidence to the contrary. In the present case there is a conflict of testimony as to who first used the word Asiatic in describing it. By so describing it much

unnecessary panic was created, and we think it would be well if medical men, under similar circumstances, would do their best to prevent sensational news of this kind being published, by using the utmost discretion and caution in their relations with newspaper reporters, who are naturally keen-scented for anything that will arouse interest, and care more for what will sell their papers than for the mischief which may be produced by false or exaggerated statements.

AN AUTOGRAPH LETTER OF EDWARD JENNER.

THE following autograph letter of Edward Jenner, on the subject of vaccination, is now in the possession of the Birmingham Medical Institute, to which it was recently presented.

It is written on the fly-leaf of a circular, which we, reprint as well, in the hope that it and the letter may be of interest to our readers.

Berkeley, February 9, 1821.

Sir,

I am happy to find that you are so actively engaged in physiological pursuits connected with the diseases of animals. It would be pleasing to me to ascertain that you are speaking experimentally on the application of grease, but the *mere matter* of grease has failed repeatedly in my hands; the matter of the vesicles by which the grease is according to my observation primarily excited, has had, however, the contrary effect. I have now under my own use and in circulation, matter which was taken from the finger of a farrier that never passed through the circulation of a cow. It produces beautiful pustules, although it has been in use nearly three years. When matter becomes deteriorated, it is in consequence of passing through a constitution contaminated by the influence of the herpetic fluid. The enclosed circular will tell you what I mean by this. The same phenomena of what is vulgarly called cow-pox, for equine-pox has been produced by handling a horse which had the pole-evil. Has it ever been considered that the sub-maxillary glands are otherwise than salivary glands as in the human subject? I

shall be happy to hear your further observations on this subject, at present they are at issue. That sheep in a meadow which have foot-rot, will have a particular something which shall communicate it to another flock, and even to other animals put in the same pasture, I have often observed; but how does it happen that a hunter in a stable badly groomed gets œdematous legs and grease also? Now I would ask whether this last disease, *called* grease, and thus generated, as superficially supposed, does not differ from the infectious disease? I had long wished to make experiments whether my notions are correct, but from want of due assistance, I have never been able to accomplish my investigations in this and many other things. I have known cow-pox on the teat of a ewe, but that instance excepted, I have never remarked any other source, except from the horse to the cow, or primarily from one infected cow to another secondarily. I should doubt there is a fallacy about the swallowing experiments, for small-pox virus has been given fifty times with bread without effect. When I have the pleasure of seeing you we will go further into this subject. With the cows I can speak without hesitation that the pock can only be produced by absolute contact. Have you gone into the origin of the two common diseases red-water in the cow, and string-halt in horses. These I have taken great pains to investigate, and I am happy to say with success. I am sorry to say that in many instances I have traced the latter to an incurable origin. I do not wish these crude observations to appear in print. I hope you will be able to fulfill your visit to this neighbourhood, as I shall be glad to have an interview with you. Excuse my troubling you with more questions, but have you made any satisfactory researches into the origin of farcy?

I remain, Sir,

Your obdient humble servant,

EDW. JENNER.

Addressed:—

For JAS. WHITE, Esq., Vety. Surgeon,
199, Vineyards, Bath.

The following is the circular referred to:—

PRESUMING that you are conversant with the practice of vaccine inoculation according to the instructions which I have formerly published, and that you may have seen,

in addition to my general observations, those which I have since made and promulgated, respecting the "varities and modifications of the vaccine pustule, occasioned by an herpetic and other eruptive states of the skin," I take the liberty of requesting to be informed, whether the observations acquired in your own practice coincide with mine? That is to say, whether the vaccine vesicles, under these contingent circumstances, go through their course with the same regularity as when the skin is free from diseases of this description?

Secondly.—Whether, on the other hand, such individuals are more liable to resist the legitimate action of vaccine lymph when inserted into the arms, than those who are free from such eruptive affections?

Thirdly.—Whether you have met with cases of small-pox, or what has been termed the varioloid disease after vaccination; and if so, whether in such cases you ascertained those deviations at the time of vaccination in the progress of the pustules on the arms, which I have described as liable to take place when the skin is affected with herpetic and other eruptions?

As you may not have the paper before you, to which I here allude, nor the short series which followed it, I will point out the periods of their publication, and where they are to be found. The first was published in the *Medical and Physical Journal*, No. 66, for August, 1804, and gives an outline of the subject of some extent. It points out the fact, that a single serous blotch upon the skin, existing during the progress of the vaccine vesicles on the arms, may occasion such irregularity and deviation from correctness, that vaccination under such circumstances cannot be perfectly depended on.

I have found abrasions of the cuticle to have the same effect; such for example as we find in the nurseries of the opulent, as well as the cottages of the poor, behind the ears and upon many other parts where the cuticle is thin. Happily we find no irregularity in the vaccine vesicle in an uncontaminated skin; but we find it if the skin is beset with these herpetic blotches, or even simple serous oozings from an abraded cuticle. It is not to be considered as of less consequence when occupying a small space; a speck behind the ear which might be covered by a split pea, being capable of disordering the progress of

the vaccine vesicle. Dandriffe may be considered as a malady of this class, the incrustation on the scalp being formed from excoriation beneath; and however slight, for there is every gradation between a thin scurfy layer of a dirt-looking substance, or even patches of this thin crust, and tinea itself. However, fortunately for the safety of the vaccine practice, and fortunately too for the ease of the practitioner, all these affections of the skin may be removed with very little trouble.* Sore eyelids are also impediments to constitutional vaccination.

The second paper relating to this subject was given by the late Dr. Willan, in answer to the following interrogatory, addressed to me by himself:† “What are the changes produced in the vesicle, when a person is affected during vaccination with the shingles, the vesicular ring-worm, or impetigo?”

To this question I made a full, and, I believe, a satisfactory reply. Its purport will be shewn by quoting a few sentences from it. “To answer this question in its fullest extent, would lead me through a wide field of observation, which I mean to go over at a future time; but the following answer may probably convey to you as much information upon the subject as you may now require.” “Vaccination, under the circumstances you mention, usually produces a striking deviation from the perfect character of the vaccine vesicle at some period or other of its progress, but more frequently in its early than in its declining stages; indeed it is commonly perceptible in a day or two after inoculation. It would be difficult, perhaps impossible, without the aid of drawings, to give a correct description of the varieties which an herpetic state of the skin is capable of producing, from those trifling deviations which prove no impediment to the vaccine security, up to that point of imperfection in the vesicle

* The most effectual application which I know for subduing these cuticular diseases, that produce impediment, is the unguentum hydrargyri nitratis, as much lowered with unguentum cetacei, or any other bland ointment, as the irritability of the subject may require. The dandriffe demands a double process, the *first* consists in removing the incrustation, the *second* in subduing the oozing. There are skins that will not well bear unctuous applications; the desicative lotions may then be made use of two or three times a day; such as those prepared with the sulphate of zinc or superacetate of lead, &c.

† It was published in the year 1806, in his Treatise on Vaccine Inoculation.

which affords no security at all. Perhaps I commit an error in saying *no security at all*, for it strikes me, that the constitution loses its susceptibility of small-pox contagion, and its capability of producing the disease in its perfect and ordinary state, in proportion to the degree of perfection which the vaccine vesicle has put on in its progress, and that the small-pox, taken subsequently, is modified accordingly.* When no deviation takes place in the ordinary course of the vaccine vesicles, or when it is inconsiderable, the herpetic blotches or vesicles, of whatever kind they may be, often assume (sometimes as early as the third or fourth day after the insertion of the vaccine fluid) a new character, not unlike the vaccine, and keeping pace in their progress, with the vesicles on the arm, die away with them, leaving the skin smooth."

These two papers comprehend, first, the simple fact of important deviations being produced by diseases in pre-occupation of the skin; and, secondly, a general account of the characters of these deviations, and their differing degrees of influence upon the vaccine protection. Some further observations were published by Dr. Wilson Philip, M.D., of Worcester, in an Appendix to his Work on Febrile Diseases, who requested some information from me on this interesting subject. This letter goes more into detail than the former, though its purport is the same, namely, to guard the practitioner against the insidious influence of a diseased skin, when he vaccinates. It will be an object of future consideration, to enter more generally into the minutiae of this subject; but a sketch like this does not afford scope for the completion of such a design. Let me advise every practitioner, not to confine his cautions, nor to narrow my meaning to one class of eruptive affections. In short, every disease of the skin, which may be called *serous*, or one that sends out a fluid capable of conversion into a scab, has the power of exerting this modifying and counteracting influence; and I have also seen purulent fluids exert a similar influence in producing deviations. If I was asked what were the other actual impediments to perfect vaccination, as a general answer I should say, that I scarcely know any

* Further observation has confirmed this opinion, and has also developed much other curious matter respecting the spontaneous blending of the herpetic with the vaccine fluid, through the medium of the constitution, when under the influence of herpes.

other except spurious matter,* or impediments too obvious to require my naming them here, such as deranging the vaccine vesicle in its progress, by incautiously robbing it of its contents, or producing a new action by external violence.

I have the honour to be,
Yours, &c.

Miscellany.

DENTAL GAS.—“There is nothing very brilliant about our Bremen dentists,” said a lady to a member of the profession in Berlin, “but they are very obliging. If you wish a tooth extracted with gas, they forthwith light the chandelier.”

A CURE FOR A COUGH.—A New York judge was annoyed by the coughing of a person in court, and after remonstrating several times in vain, exclaimed, “I am bound to stop that coughing. I’ll fine you \$10. I think that will stop it.” “Jedge,” said the cadaverous man who caused the trouble, “I’d be willin’ to pay \$20 to liev that cough stopped. Ef you kin stop it fur \$10, you’d better git down off’n that bench and go to practicin’ medicine. There’s money in it, jedge— money in it.”

POROUS PLASTER.—The true use of a porous plaster, according to a Milwaukee druggist, is “to retain the back in its proper place and let the pain crawl out through the holes.”—*New York Med. Record.*

New Books, &c., Received.

Clergyman’s Sore Throat, or Post-nasal Catarrh. By GEO. STOKER. London: J. and A. Churchill. 1884.—A Manual of Diseases of the Throat and Nose. Vol. ii. By MORELL MACKENZIE, M.D. Lond. London: J. and A. Churchill. 1884.—Clinical Lectures on Mental Diseases. By T. S. CLOUSTON, M.D. London: J. and A. Churchill. 1883.—The Relations of Pharmacology to Therapeutics. By D. J. LEECH, M.D. Manchester: J. E. Cornish. 1884.—Lectures on Mental Diseases. By W. H. O. SANKLEY, M.D. Lond., F.R.C.P. Second edition: with Illustrations. London: H. K. Lewis. 1884.—The Dress of Women and Children. By FRANCIS VACHER. John Heywood, Manchester and London. 1884.—On Tumours of the Bladder. By SIR HENRY THOMPSON, F.R.C.S., M.B. Lond. London: J. and A. Churchill. 1884.—Hospital Sunday and Hospital Saturday. By HENRY BURDETT. London: Kegan, Paul, and Co. 1884.—A Romance of War. By CHAS. CAMERON, M.D., LL.D., M.P. London: Baillière, Tindall, and Cox. 1884.

* I am happy to see that these interruptions are now discovered in Germany, as appears in Professor Hufeland’s Journal for June, 1819, an extract of which is given in the London Medical Repository, vol. xiv., p. 502. In addition, see Bateman’s Synopsis of Cutaneous Diseases, pp. 222, 223. Cross’s History of the Variolous Epidemic at Norwich, 1820, pp. 60, *et seq.* 196, and 288. I was lately puzzled to find the cause of irregularity in a vaccine vesicle, the skin being free from any apparent eruption; upon minute enquiry I discovered a whitlow on the thumb, in which suppuration had taken place.

THE
BIRMINGHAM MEDICAL REVIEW.

OCTOBER, 1884.

ORIGINAL COMMUNICATIONS.

AN ADDRESS, DELIVERED
AT THE OPENING OF THE WINTER SESSION
AT QUEEN'S COLLEGE.

BY JAMES SAWYER, M.D. LOND., F.R.C.P.,
PRESIDENT OF THE CLINICAL BOARD, SENIOR PHYSICIAN TO THE
QUEEN'S HOSPITAL, AND PROFESSOR IN THE COLLEGE.

I HAVE the honour to address this assembly of the friends and of the students of Queen's College, upon the occasion of our formal inauguration of a new academical year. I am sure we may congratulate ourselves, with unqualified confidence, upon the continued growth and prosperity of the Birmingham medical school, and particularly upon the progress and promise of this College. As an old student of Queen's College, I am proud to note that my *alma mater* was never sounder in her constitution, nor stronger in public and professional confidence. For many years our College has pursued, with unbroken success, a broad and enlightened educational and administrative policy. As the central home and authority of the Birmingham medical school, our College has proved that that school can only be enduringly strong while it is inclusive and united. The College has sought, with much and signal success, to

draw within and around it, in individuals and in institutions, all that is best in the teaching strength of our great community. In its wise coalescence with the Sydenham College, in its intimate connections with the General and the Queen's Hospitals through the Clinical Board, in its well organised dental department, in its reciprocal arrangements with the Mason Science College, by which our medical students have access to the unsurpassed educational advantages of that great institution, and in the extension and specialisation of its own teaching, the Queen's College at Birmingham has so developed and consolidated its resources that it stands confessed to-day, without question, and beyond cavil, one of the largest, one of the most advanced, and one of the best equipped schools of medicine in this or in any other country.

Examination is the dominant "note" of our current medical instruction. Two or three generations ago the leading principle of medical education was imitation. Now the student has set before him examinations he has to pass; then the apprentice had before him a master to imitate. Now our teaching is professorial, and to a class; then it was more personal, and to an individual. There is much that is good, doubtless, in our present system of medical education; but I am afraid we have scarcely preserved all that was good in the system we have set aside. I dare say we have been gaining in professional knowledge. Have we not been losing somewhat in professional wisdom? We have been growing in scientific precision. Have we not sometimes been loosening, and are we not in danger of losing some of our best traditions?

I have been asked to say a few words especially addressed to the medical students who are here this evening, and who are about to begin or to resume their professional studies. To them I say—fellow students, you come to our school to

get knowledge. It will not, I am sure, be the fault of our school if each of you do not get in it, in fair proportion, the knowledge it offers you. In our laboratories and in our books, in our museums and in our lecture-rooms, and in our hospital wards and mortuaries, your several teachers, in their expositions and in their practice of the sciences and arts they profess, will continue to submit to your senses—to your eyes and to your ears, to your hands, to your noses, and to your mouths—an endless store of objective facts in the sciences and arts of medicine; and in each of you it will depend upon himself—upon your capacity, and upon the motives which guide your conduct—how much or how little of this objective knowledge you shall hold and make your own.

I am not going to urge you to seek knowledge for its own sake. Knowledge, like money, health, justice, truth, and virtue, is not an end in itself, however startling this fact may be when you first apprehend it. Knowledge, in its final appraisalment, is only an intermediary means, which many good people are in the habit of mistaking for an end. Now, why do you come to seek the knowledge, the particular knowledge, which we offer here? Because you want to become members of the great profession of medicine; and you are probably impelled to seek entrance into our profession for no single or separate reason alone, but rather as the resultant of a variety of motives, amongst which, scientific interest, honourable pursuit of worldly means, and pursuit of distinction, are probably the most powerful.

Now I am afraid many of you are apt to imagine, as most people do when they begin preparation for a particular career in practical business or professional life, that all you want now, that all you need seek, as students, is knowledge. You have heard very often that knowledge

is power, and you are prone to think that if you have knowledge all things else will be added unto you. But surely this is not so. Knowledge is not power ; but only its material. Knowledge is only power when wisdom points its employment. Even now and here, when and whither you have come to seek and find knowledge, you must seek and find wisdom too, if you would grow in the skill and grace which the life you have chosen requires of you. "Knowledge comes, but wisdom lingers." As a psychological product, wisdom is infinitely more elaborate than knowledge. It is knowledge kneaded with exquisite complexity into every phase of your consciousness. Wisdom is knowledge which patient experience has intimately blended with your emotions and with your desires, with your volitions and with your beliefs. It is knowledge polished and finished, qualified and refined, tested and checked, proved and guided, by every pleasure which has thrilled you, by every pain which has cast you down, by every consideration you have felt of fitness and of prudence, of utility and of duty.

The systematic knowledge we offer you here, in this medical school, in our instruction in the sciences and arts of medicine, is a matter-of-fact knowledge; it is a duly arranged aggregate of objective experience, which we present, through your senses, to your minds. Take care, take most watchful care, that you get a clear and certain perception of every fact which is placed before your understanding; for clearness of reproduction is impossible without previous clearness of perception. But the wisdom I ask you to seek, even now, is more than knowledge; it is far different. When you have begun to apply knowledge, in thought and action, to the best ends and true purposes of life, you have begun to be wise. When your self-love, your search after your own happiness, has been

tempered by knowledge into prudence, and when your sympathy for others has been tempered by knowledge into duty, you have begun to be wise, for you have been putting down your pride, learning the love of mercy, and growing in the power to judge and act rightly. But, you may say, tell us how to do so much ; how to get knowledge, to learn prudence and duty, and to be wise to do rightly. I answer, make it your business, even now, while you study to get knowledge in this college and in our hospitals, to study also the words, the acts, and the lives of some of those of our profession who, without trifling with truth, and without pliancy of principle, have achieved success, and honourable competence, and the love and confidence of their brethren, and so you shall learn how to prepare for professional life, as well as for professional diplomas.

NOTES ON TRACHEOTOMY.

BY GILBERT BARLING, M.B., F.R.C.S.

DURING the time I was resident at the General Hospital, Bronchotomy was performed thirty-five times, mostly by myself. Having a brief note of nearly all of these cases I have ventured to record them as being in the aggregate of some interest, and I have appended a few notes of the opinions I have formed upon some details connected with Tracheotomy, etc. Of the thirty-five operations, eleven were followed by recovery, twenty-four by death; or, separating them into the two classes of adults and children, as in the following tables, of nine adults, four recovered and five died, and of twenty-six children, seven recovered and nineteen died.

TABLE A. ADULTS.

No.	Operation.	Age.	Sex.	Disease.	Result.	Stay in Hospital after operation.
1	Tracheotomy	47	f.	Syphilitic Ulceration	Death	4 days
2	"	32	f.	"	"	Died on operating table (See note)
3	"	21	m.	"	Recovery	66 days, left wearing a tube (See note)
4	"	33	f.	"	"	27 days, left wearing a tube
5	"	33	f.	"	"	18 days, left wearing a tube
6	"	19	m.	Tetanus	Death	Same day
7	"	59	m.	Tumour	"	One day
8	Laryngotomy	31	f.	Syphilitic Ulceration	Recovery	30 days, left wearing a tube
9	"	63	f.	Chronic Ulceration of Larynx	Death	47 days (See note)

TABLE B. CHILDREN.

No.	Operation.	Age.	Sex.	Disease.	Result.	Stay in Hospital after operation.
1	Tracheotomy	1½ yrs.	f.	Membranous Laryngitis	Death	2 days
2	"	1 "	m.	"	"	1 day
3	"	5 "	m.	"	"	1 day
4	"	7 "	f.	"	"	1 day
5	"	1½ "	m.	"	"	1 day
6	"	8 "	f.	"	Recovery	39 days
7	"	9 "	f.	"	Death	2 days
8	Laryngo-Tracheotomy	2 "	f.	"	"	12 days
9	"	2 "	f.	"	"	3 days
10	"	4 "	f.	"	"	15 days
11	Tracheotomy	8 m's.	f.	Laryngitis	"	5 days
12	"	1½ yr.	f.	"	"	5 days
13	"	1½ "	f.	"	"	1 day
14	"	2 "	f.	"	Recovery	22 weeks (See note)
15	"	2 "	f.	"	"	44 days
16	"	1½ "	f.	"	Death	2 days
17	Laryngo-Tracheotomy	2 "	f.	"	"	1 day
18	"	2 "	m.	"	Recovery	21 weeks (See note)
19	Tracheotomy	3 "	f.	Cedema from Scald	"	42 days (See note)
20	"	1½ "	m.	"	Death	10 days
21	"	2 "	m.	"	Recovery	17 days
22	"	1½ "	f.	"	Death	3 days (See note)
23	"	2½ "	m.	"	Recovery	28 days (See note)
24	"	1 "	m.	Fish Bone in Larynx	Death	1 day (See note)
25	"	2½ "	m.	Egg shell in Larynx	"	Died on operating table (See note)
26	"	1½ "	f.	Nut Shell in Bronchus	"	13 days (See note)

The mortality is high ; but it is right to remark, in at all events partial explanation, that many of the patients were very young, eleven of them being under two years of age, and that in all cases, except No. 26, operation was deferred to the latest possible time, so that each recovery was undoubtedly a patient saved from death. A question which has many times occurred to me is whether some of these patients would have been saved by earlier operation ; take for instance Nos. 13, 17, and 24, each of these survived the operation but only for a few hours, and no definite lesion was found p.m. that would account for death. Are

we justified in believing that in these instances the exhaustion of muscular power from the long continued struggle for air, the crowded cavities of the heart and the disturbed pulmonary circulation are conditions from which patients may not recover even when air is freely admitted by operation. If we do believe this, then we must feel inclined to interfere at an earlier time than when a patient is threatened with actual asphyxia. Although no doubt the introduction and retention of a tube in the trachea must add some additional danger to the disease from which a patient is already suffering, yet the fear of this risk should not be allowed to cause one to incur a danger possibly greater, from too long delay. I have no hesitation in saying that, in future, I shall be inclined to interfere earlier, even in very young children, unless the disease they are suffering from is diphtheria.

On referring to the table A, it will be noticed that case 2 died on the table; natural respiration did not occur after the trachea was opened, and p.m. one lung was found collapsed, its bronchus being obstructed by necrosis of some of the cartilages. Chloroform was administered.

In No. 3, laryngeal obstruction was due to the destruction produced by congenital syphilis, and is the only case I have seen in which the congenital form of the disease has produced such extensive lesion of these parts. In addition to the laryngeal mischief, the palate exhibited a remarkable deformity; the posterior edge of the soft palate was adherent to the wall of the pharynx, so that, except for a perforation in the middle of the soft palate itself, the upper and lower parts of the pharynx were separated by a diaphragm. No. 9 lived nearly seven weeks after laryngotomy was performed, and she died from exhaustion due to the laryngeal disease, which was probably malignant.

In table B the cases may be divided into four groups, according to the disease from which they were suffering. They are (*a*) membranous laryngitis ; (*b*) laryngitis where no membrane was found ; (*c*) œdema from drinking hot water, and (*d*) foreign bodies in the air passages.

The cases of membranous laryngitis were probably all diphtheritic, and of the ten patients suffering from this disease only one recovered ; and although a recovery of one in ten is anything but an encouraging result, it must be born in mind that, without tracheotomy, the tenth would have died also, and that life was prolonged by several days in other cases.

Referring to the patients suffering from non-membranous laryngitis, it will be seen that Nos. 14 and 18 were each in the Hospital some five months. This prolonged stay was due in both instances to the development of whooping cough whilst the children were wearing their tubes, and a most distressing complication it proved. For some weeks the tubes were necessary to prevent actual asphyxia during the paroxysms, but as these subsided an attempt was made to withdraw the tubes, when it appeared as though the larynx had forgotten its functions, for hardly any air passed through it, nor were the voice sounds produced. With the intention of gradually accustoming the larynx to resume its duties, Cresswell's tubes were employed, but the small aperture left for supplying air when the caps were applied soon became choked by mucus, so the ordinary bivalve tube was again resorted to. By very gradually withdrawing the tube, and by encouraging and educating the children to use their voices, they both slowly recovered, and have now perfect control over their respiration and voice production.

Of the five patients suffering from scald of the swallowing passages, three recovered. Previous to performing

tracheotomy, scarification was resorted to in Nos. 19 and 22, but no good resulted from it, and in future I should reserve it for older children, as in very young ones the want of room prevents one scarifying as freely and as accurately as one could wish. Case 23 was very interesting. The patient, a boy aged $2\frac{1}{2}$ years, 36 hours before admission had drunk out of a teapot. When brought to the Hospital there was great recession of the thoracic walls, a high temperature, and signs of consolidation at the right base, believed to be due to collapse of lung. The child was so exhausted that it seemed doubtful whether it was not too late to operate, but it was decided to give him the benefit of the operation, so the trachea was opened, with much relief. What appeared to be collapse of lung turned out to be lobar pneumonia, which involved the whole of the right lower lobe, through which the child managed to struggle, but he was much troubled by the tenacious sputum which clung to the tube and excited the most violent paroxysms of coughing. The successful issue of such an apparently hopeless case would make me careful in the future not to reject tracheotomy even when a considerable amount of lung mischief complicates the laryngeal obstruction.

The last three cases in the list are instances of foreign bodies in the air passages, and unfortunately all of them died. In Nos. 24 and 25 there was no history indicating the presence of a foreign body, and they were regarded as ordinary cases of laryngitis. No. 24 was a very puny infant, and died apparently of exhaustion. No. 25 died on the table, and I believe might have been saved by earlier operation, for respiration ceased before the trachea was opened, and could not again be restored. In both of these patients *post mortem* examination showed a foreign body (a piece of bone in one, and a piece of egg shell in

the other) impacted in the larynx. The history in case 26 was quite clear, and tracheotomy at once resorted to, but the foreign body, a piece of nut-shell, was not removed, and the child died on the 13th day. The *post mortem* examination discovered the nut-shell in the right bronchus, where it had produced an abscess pointing into the right pleura.

And now to consider a few points in connection with Bronchotomy :—The first naturally is, whether an anæsthetic should be used, and here there is generally difference of opinion ; practically, the only anæsthetic used is chloroform, and death has several times been attributed to its use, especially in adults. When one realises the difficulties under which the heart labours in asphyxia, it is not surprising that the use of chloroform should at times prove too depressing for that organ, the more so when we remember that many of the patients are broken down in health, and their heart muscles in anything but a healthy condition. The cavities of the heart then crowded with blood, so that they are imperfectly emptied and with difficulty ; the increased resistance to the flow of blood in the arteries owing to vaso-motor contraction, and the nutrition of the heart by de-oxygenated blood ; all these things together render it necessary that chloroform should be given very sparingly to adults ; in fact it would be better left unused ; but if a patient insist on its use, it should not be pushed to its full physiological effect. With children the case is different. Here there are two important reasons for anæsthesia : the first is, that it is useless to appeal to their self-control when they are hurt, and so their bodily movements are added to the inconvenience caused by their violent respiratory acts ; and the second, that the laryngeal obstruction is generally aggravated by spasm of the laryngeal

muscles, which spasm is markedly diminished by the use of chloroform, so the danger of sudden cessation of respiration is not so great, and the trachea is much steadier. Failure of respiration is the danger most to be dreaded during tracheotomy, but more in adults than in children, for the rigid chest walls in the former render artificial respiration less efficient than in the mobile chests of children.

In text books there is generally a rather horrifying account given of the numerous mistakes that may be made in tracheotomy, and it is evident that in the main they are due to operators losing their heads ; and, perhaps, to a less degree, to want of care. If the following rules be acted upon, difficulties are not likely to arise :—Don't hurry ; keep in the middle line ; recognise all the structures as they are exposed ; before opening the trachea fix it with a sharp hook, which retain until the tube is introduced ; cut upwards when dividing the tracheal rings, and in this last act take care that the scalpel does not penetrate too deeply. I mention the last, because I believe that one of the mistakes most frequently made is that the œsophagus is wounded through the posterior wall of the trachea. This, of course, is not likely to happen in adults, but in young children the diameter of the trachea is so small, that if the scalpel is thrust boldly in, the œsophagus is more in danger than is generally supposed.

When operating upon children laryngotomy is, of course, not feasible ; so the choice lies between laryngo-tracheotomy, high tracheotomy, and low tracheotomy, and of these I much prefer the second. Laryngo-tracheotomy has the disadvantage of dividing the cricoid cartilage, which, as one of the points of attachment and support of parts of the larynx, is better left intact ; and the performing of low tracheotomy, where the higher

operation can be done, seems to be simply courting difficulties without any corresponding advantages. The only structure likely to prove troublesome in high tracheotomy is the thyroid isthmus ; this, however, can be easily displaced downwards, if a transverse incision be made along its upper border through the fascia which supports it, and it may be then gently pushed down by the handle of the scalpel. I have several times performed this operation without having to tie a single vessel ; but once, owing to the existence of a large isthmus, I could not expose the upper two rings of the trachea, so, as the case was urgent, I completely divided the isthmus, which did not give any trouble from hæmorrhage.

The variety of tubes in use indicates that there is difference of opinion as to which it is best to adopt for all cases, and no doubt one is at times substituted for another with advantage ; but as a rule I much prefer the bivalve tube, mainly because it complies with three important requisites more fully than any other ; it is easily introduced ; the inner tube is easily removed for cleaning ; and in proportion to the size of the tube gives free entrance of air to the trachea. One objection urged against the bivalve tube is, that it produces ulceration of the anterior or of the posterior wall of the trachea by pressure ; if the curve of the tube be too sharp the anterior wall is endangered ; if the curve be too open, then the posterior ; but frequent use of the bivalve tube leads me to believe that if it be properly made no harm is likely to happen : it was almost invariably used in the cases collected here, and in no instance did *post mortem* examination show ulceration of the trachea produced by the tube. Of course the question turns upon this—‘a properly-made tube.’ As an instance of what I mean I will mention one suitable for an ordinary child of about

seven years of age : this tube is a quarter of a circle, the diameter of which is two inches ; the tube is attached to the shield by a movable collar so as to allow of movements of the neck which do not disturb that part of the instrument in the trachea ; and lastly, the shield is an inch and a half long, so that it does not sink into the wound, as happens with the little circular shield commonly in use.

A few words as to the treatment after Bronchotomy:—The main question is, whether the atmosphere in which the patient is placed should be steamed. It is one of those details upon which it is difficult to speak positively ; but my impression is, that it is a mistake to steam—certainly my own cases did better when steaming was omitted. Two objections to it are that the moist warmth depresses patients, and that they are apt to become chilled by the steam condensing on the bed clothing, etc. As a substitute I recommend that the bed should be placed in front of a fire and screened on every other side, or that a small room should be used, the temperature of which can be well controlled, and maintained at about 66° to 68° F.

ACUTE MYELITIS.

CLINICAL LECTURE BY C. W. SUCKLING, M.D., M.R.C.P.,
PHYSICIAN TO THE QUEEN'S HOSPITAL.

G. C., a man aged 20, a shoemaker, admitted into the Queen's Hospital, March 19th, died May 5th, 1884.

Previous History.—The patient never had any previous illness to his knowledge, but there were scars of strumous abscesses in his neck; there was no distinct history of syphilis, and anti-syphilitic treatment when tried had no good effect but was injurious. There was no history of *alcoholism* or exposure, but his occupation compelled him to lead a *sedentary life*.

The family history as far as could be ascertained was good.

Present Illness.—The patient had been ill for eight weeks previous to admission, the illness commencing as a pain passing round the body about midway between the umbilicus and ensiform cartilage (girdle pain.) He had also numbness in the feet spreading quickly upward with sensation "of pins and needles." He had twitchings also of the legs. He took to his bed and rapidly lost all power over the lower part of the body, and all sensation. There was also some difficulty at this time in micturition. On admission the patient was found to be completely paralysed in the lower extremities.

Sensation (as to touch, pain, heat, and cold) was completely abolished up to the level of the umbilicus, where there was a well-marked hyperæsthetic zone. A pin drawn over this area occasioned a cutting sensation. In this region also there is well marked *tache cérébrale*. The special senses were perfectly normal.

Reflexes. Superficial.—The *plantar reflexes* were exaggerated; the *cremasteric* were also well marked; the abdominal and the epigastric reflexes were absent. The scapular reflex was well marked on both sides.

Deep. No *ankle clonus* or *Front Tap contraction* could be obtained. The patellar-tendon reflexes were exaggerated. The lower limbs were wasted, but no local atrophy could be made out.

*Bedsore*s were found over the right trochanter and anterior part of the iliac crest. [The patient had been lying chiefly on this side]. The skin over the trochanter on the left side was discoloured and evidently about to break down. There was no bed sore over the sacrum. The patient complained of pain in the back, and pain was elicited when percussion was employed over the 6th dorsal spine. A hot sponge passed down the spine, did not discover the hyperæsthetic zone. If one foot was pricked with a pin, or if the sole was tickled, a reflex action was brought about in the opposite foot. There was œdema of both feet. The ribs were observed to move very slightly during inspiration, and the lower intercostal muscles (below the 6th space) were paralysed. The temperature was 103° F. The urine slightly alkaline with phosphates; there was no cystitis and no paralysis of the bladder. The patient's intellect was unaffected. In a few days after admission bedsores formed on the left side where the skin had been red; but they were much worse on the right side and discharged pus freely. The superficial reflexes were much more increased on the right side than on the left. The urine soon became markedly ammoniacal, and a small amount of pus was present with triple phosphate, cystitis being set up. The urinary disturbance in the first place was merely due to loss of cerebral control, the reflex taking place unconsciously,

there was never any complete paralysis of the bladder although the catheter had to be passed occasionally.

On March 25th the patient had a rigor and was much troubled by involuntary twitchings of the legs. The pulse was quick (132) and dicrotous, diarrhœa also came on but was easily checked.

April 17th.—The bed sores have spread considerably, the bone is exposed and carious.

April 30th.—Persistent vomiting set in, which still further distressed the patient, who died from exhaustion on the 5th of May.

The *temperature* throughout was of a remittent type, averaging 101° F. in the evening, and coming down to normal in the morning.

Autopsy.—The body was much emaciated, rigor mortis was very slight. There were old cicatrices of strumous glands in the neck. Extensive sores over both trochanters (major) and over anterior superior iliac spine. There was no sore over the sacrum. The brain was normal.

The Cord, after the removal of the spines and laminæ, appeared normal, excepting the portion between the 5th and 9th dorsal vertebræ. Here the dura appeared coated with yellowish caseous material; this substance extended also through the intervertebral foramina, and for some distance along the intercostal nerves. The cord having been removed and the membranes longitudinally incised, the cord itself was found to be normal in appearance, except in the length corresponding to the length of dura coated with caseous material. In this situation the cord was acutely softened, white and creamy, the distinction between the grey and white matter being lost, both sides of the cord were equally affected. The heart and lungs were normal; there was no lardaceous change. A tubercular ulcer was found near the ileo-cæcal valve.

Kidneys.—The left weighed $9\frac{1}{2}$ ounces, and was fatty. The right 12 ounces, with yellow cheesy deposits beneath the capsule and in the cortex. In one place was an abscess from softening of a caseous mass in communication with the pelvis.

Remarks.—The case was a typical one of acute diffuse myelitis; the characteristic features of which are the rapid loss of motion and sensation in the parts supplied by nerves given off from the cord below the seat of lesion, attended with fever. The stage of irritation was first present, there being pain in the back, and twitchings, and perverted sensations, but this was quickly followed by complete loss of motion and sensation. The lesion was easily localised by means of the reflexes. 1. The *cremasteric reflex* passes through the cord at the level of the 1st and 2nd lumbar nerves. 2. The *abdominal* through the cord between the 8th and 12th dorsal nerves. 3. The *epigastric* through the cord about the 5th, 6th, and 7th dorsal nerves. 4. The *interscapular* through the cord about the two lower cervical and three upper dorsal nerves. Now the cremasteric and interscapular were present; the abdominal and epigastric absent; therefore we supposed the lesion in the cord to be situated between the 4th and 12th dorsal nerves, and it was found between the 5th and 9th. We also judged that the lesion was of considerable vertical extent. The lumbar enlargement was found to be intact, thus accounting for the absence of paralysis of the bladder and sacral bed sore. The presence of the sores over the front of the crest of the ilium and trochanters is explained by the fact that the skin here is chiefly supplied by the lateral cutaneous branch of the last dorsal nerve.

The prognosis was rendered even worse than it usually is by the evident strumous condition of the patient. The

prognosis in acute myelitis depends upon—1. The situation of the inflammation, *i. e.* the region of the cord affected; 2. The extent of the transverse section of cord affected; 3. The vertical extent. It is always more fatal in the cervical and lumbar regions than in the dorsal. More serious when the grey matter is affected, and so bed-sores break out. More serious the greater the length of cord affected.

The cord was found after death in a condition of white softening; it was like cream. This was due to the extensive fatty degeneration of the medullary sheaths of the nerves, and also of the nerve cells, and to the formation of masses of fat granules. This stage is preceded by red softening, where the affected part of the cord is swollen, red, and injected, and its consistency diminished. It was, of course, impossible that recovery could take place after such extensive softening, but had the patient not been previously debilitated he would not have died so soon.

As to the cause of the myelitis in this case:—It was found that the softening of the cord exactly corresponded to the situation of caseous material on the outer surface of the theca. Probably this material, by constricting the vessels to this part of the cord (for it extended along the nerves), was the predisposing cause.

Treatment.—If there is any history of syphilis, push antisyphilitic remedies. Iodide of potassium and ergot are of use. Absolute rest on a water bed, and cleanliness. Beware of dirty catheters. Electricity must not be employed in acute myelitis. The bed-sores must be kept clean, and the patient must be kept up as well as possible by plenty of good food. Stimulants may be given in moderation.

CASES OF ORBITAL CELLULITIS AND ABSCESS.*

BY HENRY EALES,
SURGEON TO THE BIRMINGHAM AND MIDLAND COUNTIES EYE HOSPITAL.

IT is not possible within the limits of this paper to discuss at any length the question of acute inflammation of the cellular tissue of the orbit, and its causes, which are of the most varied description ; I therefore propose only to give a short account of a few remarkable cases which have come under my notice, and of which I have only, I regret to say, but too brief a record. Their salient features, however, are sufficient to show the dangers attending this condition, and the variety of its causes.

My chief object, however, in bringing this subject before this Society is not so much to instruct as to elicit information, and excite discussion ; because, although this condition may appear at first sight to be of special interest only to the ophthalmic surgeon, it will be seen that it is so often a complication of disease in parts which do not concern this specialty, so that it must often come under the notice of all practitioners of medicine.

I do not propose to give any cases of this condition arising after excision of the eyeball, or after injuries of that organ, or of the other orbital contents, which are only of concern to those practising ophthalmic surgery. I will, however, give one case of this condition occurring with acute suppuration of the globe, which was probably

* Read before the Midland Medical Society.

its cause, because of the difficulty in making a correct diagnosis at the time as to the relation between the cellulitis, and the destruction of the globe, as to which was cause, and which effect, or whether they were only concomitant.

On Feb. 22, 1883, at the request of Mr. De Denne, of Cradley, I saw with him a case of which the following is the summary. A young married woman, æt. 22, in feeble health (from over lactation), was seized, a few days previously, with pain of an intense throbbing character over the left side of the head, which rapidly got worse, and was accompanied by proptosis of left eye.

At my visit I found the eye protruded considerably, straight forward. Its movements were much impaired in all directions. There was great heat, swelling, and redness of the lids, which could barely be closed over the protruded eye, the cornea of which was dry and opaque from exposure. There was much chemosis of the conjunctiva, and pus in the anterior chamber. Tension = + 3. Vision absolutely gone; not even perception of light present. Ophthalmoscopic examination showed no optic neuritis in the other eye. The patient was prostrated with pain, and was continually moaning. There was no bruit heard over the temple, nor was there any pulsation of the orbital contents.

From the presence of pus within the eye, the great tension and loss of vision, I was of opinion that the case was one of acute suppuration of the globe, the orbital cellulitis being secondary to this; because though the eye is often lost in orbital cellulitis, it is usually later in the history of the case, and the destructive changes are often for some days confined to the exposed cornea, which sloughs, a condition not present in this case. I therefore, (Mr. de Denne having administered chloroform) made a

puncture into the orbital tissue, the whole depth of a Sichel's knife, and failing to find pus, I then made a puncture through the sclerotic into the vitreous chamber, but failed to get evidence of pus here either: therefore I advised that the warm fomentations, previously employed be continued, and the patient supported with a light, but liberal nourishing diet, and quinine and alcohol administered internally, with a view to check the suppurative tendency and prevent stasis in the vessels. Morphia to be given to relieve pain if necessary.

The patient was somewhat relieved by these punctures, and the treatment, but matters getting worse I saw her again on February 26th, when chloroform having again been administered I repeated the punctures into the orbital tissues which bled profusely as before, but no pus escaped; on making a small puncture into the eye, evidence of suppuration of the vitreous was at once apparent, I therefore abscised the whole front of the eye, including the ciliary region, and removed the suppurating vitreous humour. From that time the patient's sufferings ceased, the cellulitis subsided rapidly, and her general health quickly improved.

Remarks.—This case is instructive on account of the impossibility of determining with certainty the presence of suppuration in the vitreous, the puncture into the globe giving no indication of it, probably in consequence of there being no localised collection of fluid pus, but only a general infiltration of the vitreous with pus, such as was found on the second occasion; then, however, with a distinct collection of fluid pus in the centre of the body. It was therefore impossible to determine at that time the relation of the orbital cellulitis, to the eye-condition, though subsequent events clearly showed it to be secondary to general suppuration of the eyeball.

I would here specially draw attention to the importance of noticing if possible, in these cases, whether the loss of vision precedes, or follows, the proptosis; in order to ascertain which is the secondary affection, and I wish also to remark that puncture of the globe is not justifiable purely for diagnostic purposes unless vision is lost, and there is strong reason to suspect from the presence of pus in the anterior chamber, that the globe is suppurating, when it may be resorted to, especially if the tension is high, with the double object of assisting in the diagnosis, and relieving the pain caused by the high tension, generally present in such cases.

CASE II.—K. A., a girl aged 14 years, came to the Eye Hospital on Monday, July 3, 1882, with considerable exophthalmos of the right eye, only slight injection of the conjunctiva and skin, and no chemosis. Vision was much impaired, and there was diplopia, due to the movements of the eye, especially inwards, being impeded. There was no pulsation of the globe or orbital contents, and no bruit over the right temple.

Ophthalmoscopic examination showed well-marked optic neuritis in the protruded eye, but none in its fellow. On enquiry I learned that she had long suffered from ozæna in the right nostril. Had suffered for three months past from constant frontal headache, and that the exophthalmos came on only two days previously to her visit.

Suspecting nasal caries to be the cause, and the case not being an urgent one, I ordered her a mixture of iodide of potassium, with carbonate of ammonia and tincture of cinchona, a smart purge, fomentations, and a liberal diet, together with an injection of oil of eucalyptus to be syringed up the right nostril. Under this treatment matters got no worse, and some ten days after her first visit she became suddenly seized with a discharge from the right nostril of "nasty, yellow, dark, very offensive matter, streaked with

blood ;" and from that moment the proptosis commenced to subside, and the optic neuritis also ; and in the course of three or four weeks she was quite well, except for the ozæna, which continued ; the exophthalmos having disappeared, and the optic neuritis scarcely leaving a trace of its former existence ; vision being quite normal ($v = \frac{20}{xx}$).

Remarks.—This case illustrates well one of the commonest causes of orbital cellulitis, namely, the existence of caries of the bones in the neighbourhood of the orbit. The discharge of pus into the nose in this case illustrates one of the dangers of orbital abscess, namely, its tendency to discharge into a neighbouring cavity, which, if it happen to be the cranial cavity, is almost certainly attended with death. It also suggests the propriety of making an artificial opening into the nose in a case due to caries of the bones of that cavity, as advised by Riberi, of Turin ; a plan which I should be inclined to adopt if a similar case came under my care.

The presence of optic neuritis too, suggests the origin of the optic atrophy which often takes place in orbital cellulitis, causing permanent blindness, and indicates the importance of giving early relief by surgical interference in cases where the neuritis is severe.

The theory that the atrophy in such cases is due to the stretching of the nerve is founded on a faulty knowledge of the anatomy of the parts, the nerve being long enough to admit of considerable proptosis without being stretched.

I ought not to omit to mention that Dr. Knapp has recently shown a case at the American Ophthalmological Society, in which the atrophy was preceded by symptoms of thrombosis in the retinal blood vessels, which he thinks is likely to be an important factor in the causation of the atrophy of the nerve found in these cases.* So also the

* See paper by Thos. R. Pooley in New York Medical Journal for March 1, 1884.

theory of compression of the nerve is unnecessary, as we now know, by direct observation that the nerve only too readily, as in this case, partakes of the inflammatory process going on in the tissues around it.

CASE III.—On July 28, 1883, Mr. Bradley, of Hurst street, requested me to see the following case with him:—

Miss M., æt. 20, suffering from all the symptoms of right orbital cellulitis in an intense form ; there was considerable protrusion of the globe, the cornea being exposed and dry, but otherwise healthy ; there was no pus in the anterior chamber, considerable chemosis, great swelling and redness of the lids, but no pulsation of the orbital contents, or bruit over the right temple. The patient was quite intelligent, but tossed her head from side to side, and shrieked with pain, and was frightened at our mere approach.

On enquiry I learned that she had suffered from ozæna for a long time, as well as from a discharge from the right ear, but there had never been any facial paralysis.

The patient having had ether administered to her, I made exploratory incisions into the orbit to its extreme depth, one on the inner side, and one on the outer, but without getting any evidence of pus, or of diseased bone. There was no symptom clearly indicating any intracranial mischief at this time ; for though the pain on the right side of the head was great, there was no vomiting. I regret that in consequence of the restlessness and tossing about of the patient, I made no attempt to examine the eyes ophthalmoscopically, thinking it useless to try. I am, therefore, unable to state what was the condition of the optic discs at this time, an examination of which might have given undoubted evidence of intracranial mischief, in the absence of which I gave a favourable prognosis, which was however soon falsified ; for three

days after my visit she became suddenly seized with hemiplegia of the left side, and two days later died comatose.

Remarks.—This case fully illustrates the importance of making an ophthalmoscopic examination in these cases of the eye opposite to the exophthalmos; for though the absence of optic neuritis would not exclude the possibility of intracranial disease, its presence would be strong presumptive evidence of its existence. Optic neuritis only in the protruded eye, as in the preceding case, indicates only extension of the cellulitis to the optic nerve, and is not of grave importance. As no post-mortem was made in this case, it is impossible to know the cause of the cellulitis. That it was due to caries of the bones in the neighbourhood of the orbit is suggested by the existence of ozæna and otorrhœa. Whether caries of the petrous bone set up suppuration which spread through the sphenoidal fissure to the orbit, there causing cellulitis; or whether the same condition merely set up thrombosis in the cavernous sinus, and a proptosis which in time would have exhibited the phenomena of orbital aneurism had the patient lived; or whether the condition was one of caries of the body of the sphenoid bone, setting up simultaneously mischief in the orbit and within the cranium, it is impossible to conjecture.

CASE IV.—A. W., æt 28, was sent to the Eye Hospital on September 5th, 1881, by Mr. Reginald Bower.

On admission he was found to have most intense orbital cellulitis, with extreme protrusion of the globe and chemosis; not only the skin of the lids being red and puffy, but the whole side of the face being puffy, and having a dusky red blush. He had muttering delirium, quick pulse, a high temperature, from 102° to 105° F; frequent diarrhœa while in the hospital, and died, 15 days

after admission, on September 20th, apparently from exhaustion, no pus having formed in the orbit.

Dr. Saundby and Dr. Malet, who saw him with me, considered his case to be an erysipelatous cellulitis.

Remarks.—This case seems to represent well those cases of erysipelas in which the inflammation spreads to the deep cellular tissue of the orbit, causing atrophy of the optic nerve seen in those cases which do not terminate fatally.

CASE V.—About a month ago Mr. Harmar sent a little child to the Eye Hospital with a note asking for my opinion. It was aged $2\frac{1}{2}$; presented considerable proptosis of the left eye, chemosis of the conjunctiva, with redness and swelling of the whole left side of the face, and screamed with pain. This condition set in two days previously.

Chloroform having been administered, I made an examination and found a sinus just above the left upper lateral incisor discharging pus, and on putting a probe into it found the outer surface of the superior maxilla to be stripped of its periosteum over a large surface right up to the orbital margin. I also found another sinus just behind the left upper molar tooth, also discharging pus, and on introducing a probe into this it went up into the Antrum of Highmore, which appeared full of pus.

I wrote Mr. Harmar saying that the orbital cellulitis was only a complication of the abscess in the antrum, and that if the latter were treated the former would soon subside.

Mr. Harmar has since informed me that he made free incisions into the antrum, and that the case speedily got well.

This case shows well the tendency of disease about the upper maxilla to set up orbital cellulitis, and suggests

the importance of examining the state of the teeth in cases of proptosis, for in more than one case of orbital cellulitis terminating fatally, a carious tooth appears to have been the cause, or it has followed the extraction of a tooth. In these cases a phlebitis appears to have spread to the orbital veins, and thence to the intracranial sinuses, causing meningitis with or without the symptoms of pyæmia.

CASE VI.—Some years ago, when I was House Surgeon to the Eye Hospital, a case was admitted under my colleague Mr. Lloyd Owen, in which orbital cellulitis was suddenly set up by an orbital cyst (? congenital) which had previously given no evidence whatever of its existence.*

I shall not now record any cases of abscess of the frontal sinus, or of caries about the orbital margin, which are not uncommon, as they do not usually cause deep cellulitis of the orbit with proptosis, the pus usually discharging superficial to the tendo palpebrarum.

In the Ophthalmic Review for August, 1883, will be found the record of a case, which I saw at Dr. Russell's request at the General Hospital, in which the presence of pus in the orbit, with caries of the roof, was accompanied with double optic neuritis, and symptoms of intracranial disease, which was highly suggestive of the orbital disease having spread to the cranial cavity; but in which the subsequent history and recovery of the patient seem to indicate that the double optic neuritis was due rather to a concomitant intracranial node than to the orbital condition.

As regards the diagnosis of orbital cellulitis, with the exception of distinguishing it from so-called orbital aneurism, there is no difficulty, for in the case of tumours these do not form so rapidly, can generally be felt, and

* See Birmingham Medical Review, Oct. 1877.

are usually so localised as to push the globe in one or other direction, and do not simply protrude it forwards; but the diagnosis from orbital aneurism, in its early stages, is sometimes most difficult, or even impossible, and some of the best surgeons, ophthalmic and general, have plunged their knives into the orbital tissues in search of pus in cases which have subsequently developed all the well marked symptoms or pulsating exophthalmos, or so-called orbital aneurism, and this is not surprising when we reflect that "pulsating exophthalmos," though generally due to a communication forming between the carotid artery and the cavernous sinus, has often been typically produced by some local disease, (as of the sphenoid bone) causing thrombosis of the cavernous sinus, without such communication, resulting after a time in distension of the orbital veins, to which the pulsation of the internal carotid artery in the cavernous sinus have been transmitted.

In all cases of exophthalmos the surgeon should note if there is any pulsation of the orbital contents, or any thrill to be felt on placing the hand over the swelling, or if any bruit is to be heard over the temple or eyebrow, as in orbital aneurism one or all of these symptoms will probably be present. The history of a blow previous to the onset of symptoms too, always suggests the probability of aneurismal varix being the cause of the proptosis, most cases of this condition having been caused by violence, as in a typical case shown by me at this Society two years ago.

The opposite error of mistaking an orbital abscess for an aneurism will almost never occur, though a remarkable case of this kind, in which an abscess apparently simulated all the signs of an aneurism, has been recently reported.* Emphysema of the orbital

* See British Medical Journal, Feb. 23, 1884.

contents is usually easily determined by the crackling feel, the history of its setting in suddenly during an effort to blow the nose, and generally the previous history of direct violence.

Without denying that cellulitis may occur spontaneously, in the delicate and feeble, or the gouty and rheumatic, from exposure to cold, yet I do not think we are justified in diagnosing it to be spontaneous unless we can fairly exclude the probability of its being caused by an extension of disease from neighbouring bones or cavities, amongst which I would specially note the upper jaw and teeth. We must also exclude the possibility of its being only a local manifestation of pyæmia or erysipelas.

That this condition, however caused, is rare, is shown by the fact stated by Mr. Spencer Watson, in his monograph, that only 4 cases occurred at Moorfields Eye Hospital in 1864, out of 12,000 patients, and by the fact that only 4 cases occurred in our own Eye Hospital last year, out of about the same number of patients.

The prognosis is always grave—out of the 30 recorded cases collected by Mr. Spencer Watson, 13 died ; but he admits, however, that these figures are not a fair representation of its gravity, many simpler cases probably being unrecorded ; and in this view I think all will concur. Our opinion must depend on the presence or absence of symptoms of pyæmia ; on the existence or not, of symptoms of the mischief having involved the cranial cavity ; on the probability of its being caused by bones forming part of the cranial cavity, or not. Its existence, therefore, on both sides is always grave, as indicating mischief about the sphenoid or ethmoid bones ; or its having spread from the cranial cavity by the sphenoidal fissures. Curiously enough, Mr. Bradley, some years ago, had such a case, which terminated fatally, and so took a very grave view of the case recorded in this paper, which also died.

Treatment must be guided by the special features of each case, and the general rules usually applicable to inflammatory and suppurative conditions. Quinine and alcohol are usually advisable. Locally, heat in the form of poultices or fomentations is useful. Cold applications are of little use in a condition so deep seated, and likely to go on to the formation of pus. Incisions are useful, both to relieve the vascular hyperæmia of the tissues, and to admit an exit for pus, if formed. If the eye suppurates, great relief is afforded by freely incising the globe.

REVIEWS.

DISEASES OF THE HEART AND THORACIC AORTA.*

THIS volume ranks as one of the largest on diseases of the heart and surpasses all others in the number of its illustrations. Whether all the illustrations are worthy of the care bestowed upon them or the space occupied by them is doubtful, but in a book which is mainly intended for students, profuse illustration is a good fault. The persevering industry which is implied in the writing of a text book commands admiration, but from its nature it does not in our time afford that scope for originality of view or for freedom in treatment, which would have been afforded by a monograph on some special section of the wide field of heart diseases, or even by such a series of lectures as has emanated from Edinburgh from the pen of Dr. George W. Balfour. The book before us is characterised by severe method which is a considerable aid to the student in the acquisition of knowledge, while to others it lessens the comfort of smoothness in its

* Diseases of the Heart and Thoracic Aorta. By Byrom Bramwell, M.D., etc. Edinburgh: Young J. Pentland, 1884.

perusal. It contains much of the every day teaching on the subjects with which it deals, and the author while touching upon the opinions held by some others, usually indicates the view which he prefers, although that view is not advocated with the energy and power which characterised the old masters or even by that strong confidence which marks such an excellent modern text-book as that of Hayden. In no section has he approximately exhausted the teaching of former workers, but in a text book this is not perhaps necessary, while to those specially interesting themselves in this department of medicine, there are other books where such knowledge can be readily obtained.

The physiology of the heart is based upon Foster's well-known and valuable text-book, and on Gaskell's experiments. The various kinds of sphygmograph are described fully, while an appendix of 20 pages is devoted to the cardiograph. These will be of value to the student who requires to have his physiological knowledge refreshed, and so far as we can remember are not to be found in any other English book of the kind. Similar chapters will probably for some time to come appear as the modern representations of the description of the stethoscope which is to be found in Laennec's famous work, and which was imitated by others.

Lack of space forbids us to enter fully into a critical examination of this work, and it perhaps suffices to say what we have already indicated, that the book fairly lays before the reader the more ordinary teaching on things cardiac. That in many details this should be inaccurate is hardly matter for surprise, and is but a repetition of the earliest authoritative teaching.

The section which we incline to regard as best bearing comparison with the treatment of the same subject by many others is that on endocarditis. The division into simple acute, or acute ulcerative, and chronic endocarditis is not the most perfect with which we are familiar, but clinical features are more successfully portrayed, and the differential diagnosis is dwelt upon at considerable length, and with a considerable measure of success. The contention that a mitral regurgitant murmur appearing in the course of acute rheumatism is practically to be regarded as due to an inflammatory affection of the mitral segments or of the muscle proper, reminds us of the teaching of

Latham, who had a very large proportion of *recoveries* from rheumatic endocarditis which he attributed to the active treatment he employed; the diagnosis having been made entirely dependent on the presence of a blowing endocardial murmur. We were under the belief that we had reached a stage nearer truth than this.

There are some peculiarities of style which we should wish to see corrected, such as the introduction of foot notes which might, with hardly an exception, have been introduced into the text without detriment to the work, and certainly with increased comfort to the conscientious reader; while the use of such colloquialisms as "part and parcel" is to be deprecated, and beginning sentences with "*vice versa*" is not only wrong, but is sufficient to make the most humble lover of style tremble for the future of his mother tongue.

THE ALPINE WINTER CURE.*

THIS little book is part of a new edition of the Alpine Climate Series, and is evidently written with the purpose of drawing attention to the value of Maloja, a new health resort, higher up the valley than Davos, but presenting some advantages in situation and climate besides the main one of an excellently appointed Kursaal, with good sanitary arrangements, and the absence of those urban characters which are rapidly modifying the aspect, and, indeed, the curative value of Davos. The book affords much useful information to those who wish to advise others or intend themselves to go to the Engadine. It has some curious typographical blunders. We might speak of the "*damnness*" of the English climate, but it seems rude and out of place to do so of these health resorts. *Ires* is not the proper plural of *iris*, nor is *Luft Kur Ort* the correct translation of air cure (as a method of therapeutics), as it signifies the *place* at which this method is employed. The account of the water at Maloja (p. 76) is evidently translated from the German, and is quite unintelligible. The author speaks of "prolonging a summer month to six weeks," a delightful piece of engineering that we should be very glad to learn the secret of.

* The Alpine Winter Cure. By A. S. Tucker Wise, M.D. London: Ballière, Tindall, and Cox. 1884.

MANUAL OF DISEASES OF THE EAR.*

THIS manual of Diseases of the Ear is evidently not written by an unpractised hand; its language is fluent and clear; its explanations are concise, and conveyed with intelligence; while the illustrations are above the average. It is divided into four parts, with an appendix, list of formulæ, and an index.

The first part treats of the examination of the ear, causes of ear-disease, affections of the nose and throat in their connection with diseases of the ear, and methods of treatment. The second part, of diseases of the parts of the ear covered by skin—the outer ear; the auricle, the external auditory canal, and the tympanic membrane. The third part, of diseases of the mucous tract of the ear; the middle ear, anatomical and physiological description; non-suppurative diseases, suppurative diseases, and consequences of suppurative inflammation. The fourth part of diseases of the auditory nerve and labyrinth (the inner ear), anatomical and physiological description; diseases of the inner ear, tinnitus aurium, and deaf-muteism. An appendix consists of articles on otalgia and the nervous and vascular supply of the ear. The formulæ comprise 87 local remedies, and 45 general remedies, which latter are divided into sub-cutaneous and internal. The index is a most complete one.

On page 5 an illustration is given of a concave perforated mirror with a handle, and on page 6 a concave perforated mirror with a head-band; the perforations in both illustrations being circular. The author does not mention the mirror of Messrs. Meyer and Meltzer, which has an oval perforation, and which is undoubtedly the best. This is the only point in the whole book in which we disagree with the author. There is everything in it which a student can require for examination or the practitioner for the purposes of his profession, while the specialist may learn something from it as a book of reference. It gives the results of groups of cases, a great

* Manual of Diseases of the Ear, for the use of Students and Practitioners of Medicine. By Thomas Barr, M.D., Surgeon to Glasgow Hospital for Diseases of the Ear; Lecturer on Aural Surgery, Anderson's College; Dispensary Surgeon for Diseases of the Ear, Glasgow Western Infirmary; Aurist to Glasgow Hospital for Sick Children, etc. Glasgow: James Maclehose and Sons, Publishers to the University. 1884.

improvement on many so-called manuals of diseases of the ear. The chapter on non-suppurative diseases of the middle ear is especially deserving of commendation. The book is worthy of Dr. Barr's reputation as an aurist.

THE URINE IN DISEASE.

WE have received a chart entitled the Urine in Disease, arranged by Louis Lewis, M.D., M.R.C.S., England, and published as a supplement to the Philadelphia Medical World. It is intended to present in a readily accessible form such elementary information respecting the modes of testing the urine, and the practical inferences to be drawn therefrom as should be useful to practitioners. The idea is a good one, and the sole desideratum that appears to have been lacking has been the necessary knowledge on the part of the compiler. For example, we are told that albuminous urine is of a sp. gr. of 1015 or lower, usually alkaline, diminished in quantity, and smoky or brownish, or blood red in colour. From the latter statements we might think that the urine in acute Bright's disease was intended to be described, but this is usually above 1020 in sp. gr., and very rarely alkaline; on the other hand the urine of chronic Bright's disease is often of low sp. gr., but when so is copious in amount; it is nearly always acid, generally pale. Again he says that "excess of nitric acid coagulates albumen" when everybody knows that it often dissolves it; he also recommends bichloride of mercury as a test for albumen when it is pretty well known that the albuminous body precipitated by it is present in all healthy human urines. He makes the astounding statement that "chlorate of potash, carbolic acid and lead, taken internally, give the same re-action as albumen," evidently muddling up something he has heard or read about the effects of acute or chronic poisoning by these substances in producing the excretion of albuminous substances in the urine. Among other blunders he states that nitric acid gives a brown colour with bile instead of the characteristic green; the test with iodine is not mentioned, while Pettenkofer's test for bile acids is given without any warning as to the difficulty of obtaining this re-action in the urine. The urine of patients taking salicylic acid is stated to give the "same re-action as

sugar," though which that is, is not indicated. Phosphates are said to be soluble by heat, urates not so, possibly a mere blunder. We are inclined to think that Dr. Lewis does not possess the practical acquaintance with the subject needful to the preparation of a really useful chart of this description, and that he has had to rely too much upon his books, which have proved in his hands but feeble allies.

TEXT BOOKS OF PATHOLOGICAL ANATOMY.*

WE are very glad to acknowledge these further additions to the translated portions of these very excellent manuals. The present part of Ziegler contains the diseases of blood vessels and blood, spleen, lymphatic glands, serous membranes, skin, mucous membranes and liver. The descriptions are characterised by a lucid terseness which has been well preserved in the translation. The division and arrangement of subjects is most complete, so that each point receives a notice if a brief one. The translator is not quite so successful in his own additions, which do not always show an accurate acquaintance with the subject, as for example, on page 333, where he states that Charcot and Gombault contend that biliary hepatitis is always of the hypertrophic form, a complete misrepresentation, as the liver in one of their cases was atrophied, and they carefully drew attention to this as a phenomenon of the later stages. The other, and main point in which Charcot and Gombault did fall into error is not noted. The translator too by no means does justice to English pathological literature in his bibliographies.

Part I. of the second volume of Cornil and Ranvier† contains the respiratory and digestive system. It is well written and well illustrated, but in some respects might have been better brought up to date, as in the case of tuberculosis of the lung, where no mention is made of the part alleged to be played in its production by micro-

* A Text Book of Pathological Anatomy and Pathogenesis. By Ernst Ziegler, translated and edited by D. Macalister, M.A., M.B. Part ii., sections i-viii. London: Macmillan and Co., 1884.

† Manual of Pathological Histology. By Cornil and Ranvier, translated by A. M. Hart, vol. ii., part i. London: Smith Elder and Co., 1884.

organisms. The descriptions are very full and very accurate. We have always felt that Cornil and Ranvier describe and figure what they see, and what anybody with due care can see for himself; we cannot say this of all writers on pathological histology. The work of translation has been performed admirably, and as in the case of Ziegler, the publishers have left nothing to be desired in abundance of illustration, excellence of type and arrangement. We regret very much the delay in the completion of these manuals; it is perhaps unavoidable, but it detracts seriously from their value. By the time they are completed parts will be out of date.

THE LEAMINGTON WATERS.*

THIS little work is dedicated to the medical profession, but if we were to judge it by its get-up, the style of its illustrations, and above all, by the mode of treating its subject matter, we should regard it as intended for the use of the general public. Dr. Smith is anxious that the public should give up Homburg and Carlsbad, and betake itself to Leamington. He asks—"Why go abroad, why seek in Jordan the healthful means; have we not Abana and Parpa, better than all the waters of Israel?" Unfortunately, railways and the love of novelty are inducements which outweigh such patriotic considerations in the minds of many patients, and though Harrogate, Buxton, Bath, Leamington, Cheltenham, and Tunbridge Wells still possess the waters which at one time brought them fame and fortune, and though their therapeutic properties are as well established as those of many Continental Spas, yet it appears as useless to expect those times to return as it would be to get the overworked Londoner to exchange his trip in Switzerland or the Highlands of Scotland for the quiet fortnight at Margate which satisfied his grandfather.

We have, however, every sympathy with the desire that prompts the author to make the many advantages of

* The Leamington Waters, chemically, therapeutically, and clinically considered; with observations on the Climate of Leamington. By Francis William Smith, M.D. London: H. K. Lewis. 1884.

Leamington, as a residence for invalids, better known to the public and to the profession; and we wish him every success in his evident desire to promote such public works in the town as may add to its means for affording those attractions to visitors which have, undoubtedly, been adopted with success by foreign watering places.

MEDICAL NEWS.

QUEEN'S COLLEGE, BIRMINGHAM.

MEDICAL PRIZE LIST 1883-4.

<i>Descriptive Anatomy</i> .—SENIOR—	
Medal and First Certificate	Ebenezer Teichelmann.
Second Certificate	John A. James.
<i>Descriptive Anatomy</i> .—JUNIOR—	
Medal and First Certificate	G. T. C. Barber.
Second Certificate	Ernest A. Sadler.
<i>Practical Anatomy</i> .—SENIOR—	
Medal and First Certificate	J. H. Blakeney.
Second Certificate	Ebenezer Teichelmann.
<i>Practical Anatomy</i> .—JUNIOR—	
Medal and First Certificate	Ernest A. Sadler.
Second Certificate	J. W. B. Pogson.
<i>Physiology</i> .—Medal and First Certificate	
Second Certificate	A. H. Nott.
	(Not awarded.)
<i>Practical Physiology</i> .—Medals and First Certificates	
	{ C. G. Hutchinson } <i>æq.</i>
	{ G. A. Ferraby }
<i>Chemistry</i> .—Medal and First Certificate	
Second Certificate	T. E. Hill.
	(Not awarded.)
<i>Practical Chemistry</i> .—Medal and First Certificate	
Second Certificate	Samuel Nicklin.
	B. W. Housman.
<i>Medicine</i> .—Medal and First Certificate	
Second Certificate	S. H. Harrison.
	F. W. Emery.
<i>Surgery</i> .—Medal and First Certificate	
Second Certificate	Sidney Barwise.
	F. W. Emery.
<i>Pathology</i> .—Medal and First Certificate	
Second Certificate	W. B. Featherstone.
	Sidney Barwise
<i>Botany</i> .—Medal and First Certificate	
Second Certificate	G. D. Freer.
	J. W. B. Pogson.
<i>Materia Medica</i> .—Medals and First Certificates	
	{ G. T. C. Barber } <i>æq.</i>
	{ J. W. B. Pogson }
<i>Forensic Medicine</i> .—Medal and First Certificate	
Second Certificate	M. H. Vinrace.
	(Not awarded.)
<i>Midwifery</i> .—Medals and First Certificates	
	{ W. Aston } <i>æq.</i>
	{ A. H. Nott }
Second Certificate	(Not awarded.)

HYGIENE IN ISRAEL.—We are indebted to Dr. J. Solis Cohen for a careful translation of the directions given in Leviticus (chap. xiv.) for dealing with infected places, which is interesting reading in comparison with some of the modern views on the same subject:—"When you shall come into the land of Canaan, which I have given you for a possession, and it happen that I should put the plague of leprosy on a house of the land of your possession, the owner of the house shall report to the priest—'Something like a plague has appeared in my house.' The priest shall order the house to be emptied of its contents before he comes to look at the plague, in order that these may not be rendered unclean. After that, he shall visit the house; if he finds that there is a plague in the walls of the house, as shown by sunken places, greenish or reddish, the discolorations appearing to be below the general level of the wall (that is, in the stone?), he shall leave the house, and see that it is shut up for seven days. On the seventh day he shall return and re-examine the premises. Should the plague have spread in the walls of the house, the priest shall order all the infected stones to be removed, and they shall be cast on an unclean place *beyond* the limits of the city. *The entire interior surfaces of the walls shall be scraped*, and the rubbish shall likewise be cast without the city, on an unclean place. The stones removed shall be replaced by new stones, and the house shall be re-plastered. Then, if the plague return and propagate itself in the house after the stones have been removed, and after the house has been scraped, and after it has been re-plastered, the priest shall come and examine it again, and if he find that the plague has spread in the house, it is a destructive leprosy—the whole house is contaminated. They shall tear the house down; its stones, its timbers, and all its plaster, *everything shall be cast out beyond the city*, on an unclean place. If any one should enter the house during the time that it is shut up, he will be contaminated until evening. Whoever eats in the house shall wash his clothing; whoever lies down in the house shall wash his clothing. If, after the house has been re-plastered, the priest should find that the plague does not reappear, he shall pronounce the house clean; the leprosy is healed." In other words, disinfection is complete.—Philadelphia Polyclinic.

ANTIPYRIN : THE NEWEST ANTIPYRETIC.—This very appropriate designation is applied to an artificial alkaloid produced synthetically by Dr. L. Knorr, of Erlangen, by the action of acetic ether on aniline. It is also obtained by oxidation from quinoline or chinoline. It has been patented by Dr. Knorr, for whom it is manufactured by Messrs. Meister, Lucius and Brünnig, industrial chemists. Antipyrin occurs in the form of a white crystalline powder, having a slight aromatic odour, and a somewhat bitter taste, which may be effectively disguised by solution in some medicated water or in wine. It is readily soluble in water, in the proportion of one to three. The dose for an adult, as an antipyretic, is from 15 to 30 grains, given at intervals of an hour, until 75 or 90 grains have been taken. Ranke embodies in some formulated conclusions the results of his observations. He finds that antipyrin is an antipyretic of the first importance in all the acute febrile affections; that by subcutaneous injection the effects are produced more decidedly and more promptly than by the stomachal administration, and that a less quantity of the remedy suffices, 30 grains being equal in power to twice that quantity given by the mouth; that a concentrated solution, 15 grains in 8 minims of water, can be employed by the hypodermatic method, without any local injury or accident; and that about twice the quantity of antipyrin produces the effects of a given quantity of quinine, for which it appears to be an efficient substitute. Kairin and quinine are the agents with which antipyrin is to be compared. Guttman, who makes some observations on the comparative antipyretic action of these three remedies, concludes that antipyrin is superior to kairin, but that in corresponding quantity quinine is more effective than antipyrin. Thus far we have had no observations on the use of the new remedy in malarial fevers, which will be the *experimentum crucis*, as regards its curative powers. There can be no advantage in the administration of antipyrin, as respects price, at the present time. A large demand will, of course, lessen the expense of production, but as a monopoly will exist in the person of the holder of the patent, the price can be artificially maintained.—Medical News.

EXTIRPATION OF THE KIDNEY.—At the meeting of the Medico-Chirurgical Society of Glasgow, on March 7, 1884, Dr. Macewen showed a patient from whom the right

kidney had been extirpated. The patient was admitted into the wards in an emaciated, semi-delirious condition, with high temperature and weak pulse. The history available at the time was of the most meagre description, and to the effect that he had been troubled with a urinary affection for about a year previously. His urine was loaded with pus. On examination, microscopically, a few tube-casts containing pus-corpuscles were seen, along with numerous crystals of phosphate of lime. There were dulness and swelling in the right renal region, which was painful on deep pressure. The diagnosis was renal calculi with abscess of the kidney. Within the first twenty-four hours of his admission into the hospital, it was evident that he was sinking, and that something would require to be done at once for his relief. It was thought that the renal calculus might be removed while the abscess could be opened and drained. The renal calculi were removed; one from the pelvis of the kidney of irregular form, one of its projections situated in the ureter; the other from the substance of the gland. The kidney was found to be riddled with abscesses, and as it was apparent that it could no longer perform its secretory functions, it was removed. The patient recovered from the operation with remarkable rapidity. Dr. Gairdner said that the course of events in these cases was something like this. Along the ordinary channel pus was discharged for a considerable period for a greater or less period, this going on interminably. If the patient does not succumb, then there came a time when the kidney was structurally and functionally destroyed. If an opening were now made externally, pus was discharged in this way, and this might go on indefinitely. The next step was that of waxy degeneration, or Bright's disease. It was perfectly clear that, if they were satisfied that the kidney was permanently disabled, they might save the patient's life by having recourse to the operation for its removal.—*Glasgow Medical Journal*, July, 1884.—*Medical News*.

FAT EMBOLISM AS CAUSE OF SUDDEN DEATH DURING THE ADMINISTRATION OF CHLOROFORM.—A case of sudden death during chloroform narcosis in the service of a Berlin hospital emphasizes a possible cause of death complicating the risks of this anesthetic, which must seriously add to the already sufficient perplexities of the surgeon. A stout laboring man was chloroformed

for the purpose of treating a fracture of the neck of the femur. After inhalation of three drams and before yielding fully to the drug the patient suddenly ceased to breathe, the heart also almost immediately ceased to beat. All attempts to re-establish the respiration failed. At the post mortem it was found that the lung capillaries were filled with fat globules, thus being rendered impermeable to the blood. The subject of fat embolism has already been treated of in this journal in connection with the internal dyspnoea sometimes appearing as a fatal symptom in diabetes. The blood in diabetic patients sometimes contains an unusual amount of fat. In the cases of deep, double dyspnoea and coma ending fatally, there has been found this lipemic condition generally, while the minute pulmonary vessels and capillaries, and to a less extent those of the kidneys and other organs, contain fat emboli. Extensive contusions of the subcutaneous fatty tissue, or fractures of the articular extremities of bones, through direct absorption of the liquid fat set free, may give rise to embolism. It is an interesting question how far the presence of chloroform or ether in the blood may facilitate this absorption of fat and thereby cause sudden death independent of any toxic action, such as is generally inferred.—St. Louis Courier of Medicine.

COMPARATIVE EFFECTS OF PARALDEHYDE, CHLORAL, AND MORPHIA.—Dr. Dujardin-Beaumetz publishes in the *Bulletin de Thérapeutique* (January 30th), the results of numerous trials which he has made of paraldehyde, according to M. Yvon's formula, viz., paraldehyde, twenty parts by weight, alcohol at 90° 100, syrup 75, and tincture of vanilla 5 parts. Of this solution 20 to 30 grammes (*i.e.*, two or three of paraldehyde) are given at a dose. All patients agree as to its having a less disagreeable taste than chloral, while a calm and refreshing sleep of from 4 to 8 hours is soon produced, preceded in some cases, and especially in females, by a few minutes of excitement. On awaking there is no headache or heaviness. There is, however, an extremely strong odour of aldehyde exhaled by the breath, especially when three grammes have been taken. As a hypnotic, it has proved itself superior to morphia and chloral; the sleep produced being more calm, waking being also more easy, and unaccompanied by the pains in the head, attendant upon opium. But while chloral, and especially morphia, will allay pain with-

out causing sleep, this is not the case with paraldehyde, which under these circumstances is powerless. It is however, an excellent remedy in insomnia, and that even in cases of morphiomania; its use in such a case, in the hands of Dr. Constantin Paul, having broken through the morphia-habit. It has yet to be determined whether the prolonged use of this substance may not induce disorders in the economy, analogous to those produced by alcohol, and further the stability of a substance which is an intermediate between alcohol and acetic acid, with a tendency to return to one or other of these bodies, has to be enquired into.

POISONING FROM BAD MEAT.—The recent case of alleged Cholera in Birmingham recalls to our recollection the description given by Huber (*Archiv. der Heilkunde*, 1878) of the symptoms produced by eating bad meat. It may be remembered that Dr. Hill's enquiries proved that Rolfe had been eating a quantity of tainted ham which he had bought cheaply. Now, according to Huber, the symptoms produced by eating bad meat have a certain resemblance to cholera. These are excessive vomiting, and diarrhoea, violent colicky pains, indifference to surrounding objects, rapid failure of strength, extreme feeling of cold, cramps in the muscles of the calves, and low temperature, excitability, and occasionally sleeplessness and delirium.

UTILITY OF COCA.—Dr. Hicks, writing in the *New York Medical Journal*, February 23rd, expresses his surprise that this substance is so seldom employed, and enumerates the circumstances under which he has found it highly useful. These are (1) to prevent and relieve fatigue; (2) in back-ache, accompanied by high-coloured urine, with excess of uric acid and urates; (3) in short breathing from weakness of the muscles of inspiration; (4) palpitation, without valvular lesions, due to dilatation, or weakness of the heart-muscle; (5) it renews the vigour of the intellect, and relieves mental exhaustion, rendering the flow of thought more easy, and the reasoning power more vigorous; (6) it dissipates the "blues," leaving the mind calm; (7) it destroys the craving for alcohol, and in small doses is useful in sick headache, and headache resulting from over-exertion; (8) its habitual use as a part of the daily diet conduces to mental clearness and activity, freedom from fatigue, and sound sleep.

IPECACUANHA IN DYSENTERY.—Dr. John E. Kunkler says, I believe that it is generally conceded by a large majority of our profession, that the use of ipecacuanha in large doses in the treatment of dysentery, does not date back more than fifty years. The perusal of ancient books often brings to light the fact that remedies that are sometimes heralded as new discoveries were known and used centuries ago. In reading the works of the gifted and talented French poet and author, Jean Racine, I came across a letter written by him to his son, from Fontainebleau, dated September 25th, 1693, in which he states among other things: (I translate from the French), "Say to your mother that I am sorry to learn of the illness of her coachman; I have consulted Mons. Dutertre, concerning his ailment, however, and he assures me that it cannot be dysentery, as Helvetius' remedy has been of no avail." In a foot note, I read, "Adrien Helvetius was the first physician who employed ipecacuanha in the treatment of dysentery. He used this remedy a long time as a secret. Louis XIV ordered him to make it public, and accorded him gratuity of one thousand Louis d'or." This edition of "Racine" from which this was taken was published in Paris in 1810.—*Medical Age*.

BIRMINGHAM MEDICAL INSTITUTE.

THE attention of members of the profession is requested to the following list of deficiencies in the sets of periodicals in the Birmingham Medical Institute. As it is believed that many would be willing to assist this library by gifts of back numbers, it is thought that by printing and circulating this information, important aid in the formation of the library may be forthcoming. Gifts of any of the deficient numbers should be sent to the Honorary Librarians, Medical Institute, Edmund Street, Birmingham, and will be gratefully acknowledged.

The Honorary Librarians would be glad to treat with booksellers having any of the numbers for sale.

American Journal of Insanity.—Wants all before Jan., 1881, except vols. 29, 30, 31. Also wants October, 1883.

American Journal of the Medical Sciences.—Wants the first 15 vols., except the following numbers :—May and Nov., 1832 ; May and Nov., 1833 ; Feb., 1835. Also wants vols. 17, 18, 19, 20, except Nov. 1835, and Feb. 1837 ; vol. 23 to N.S. vol. 8, except Feb. 1840, and Oct. 1844 ; vols. 26 to 30, N.S.

American Journal of Obstetrics.—Wants the first 8 vols. except Aug. and Nov., 1872 ; Feb. and May, 1873 ; May, 1875.

Annales de Gynécologie.—Wants the first 4 vols.

Archiv für Gynækologie. Wants the first 8 vols. Also vol. 12, pt. 3 ; vol. 15, pt. 2 to vol. 17, pt. 3.

Archiv für Pathologische Anatomie (*Virchow.*)—Wants the first 53 vols., also vols. 59 to 65.

Archives de Physiologie.—Wants the first 3 vols.

Archives Générales de Médecine.—Wants all before 1857 ; also May to December, 1858 ; whole of 1866 and 1871 ; Jan. 1874.

Archives of Ophthalmology.—Wants the first 8 vols.

Bibliotheca Historico-Naturalis.—Wants all before 1876.

Bibliotheca Medico-Chirurgica.—Wants all before 1877.

Boston Medical and Surgical Journal.—Wants all before 1880 (vol. 102). Also May 6, 1880 ; April 13, Sept. 7, 1882.

British Medical Journal.—The following volumes imperfect :—1860, vol. 2 ; 1863, vol. 2 ; 1864, vol. 1 ; 1866, vol. 1 ; and 1867, vol. 1. The Provincial Medical and Surgical Journal wants vol. 1, ending March 20, 1841.

Bulletin Général de Thérapeutique.—Wants all before vol. 76 (1869).

Centralblatt für die medicinischen Wissenschaften.—Wants all before Jan. 1877 ; also Index for 1878.

Chemical News.—Wants all before Jan. 1876 (vol. 33.)

Dublin Journal of Medical Science.—Wants all before vol. 1, N.S., 1846 ; except vols. 7, 8, 9, 11, 14, 15, 18, 19, 20.

Edinburgh Medical Journal.—The Monthly Journal of Medical Science wants vols. 2 to 6, 16 and 17. The Edinburgh Medical and Surgical Journal is short of vols. 72 and 77.

Glasgow Medical Journal.—Wants the first 7 vols.

Journal de Médecine et de Chirurgie Pratiques.—Wants vols. 14 to 51 (1834-80.)

Journal of Cutaneous and Venereal Diseases.—Wants the first 3 Nos.

Journal of Mental Science.—Wants all before vol. 18, except vol. 3 (1856-7); October, 1857; January and July, 1858; vol. 5 (1858-9); vol. 6 (1859-60); Oct. 1860; Jan., April, and Oct., 1861; Jan. 1862; vol. 8 (1862-3); vol. 9 (1863-4); April and July, 1864; 1865; Oct. 1871; Jan. and Oct., 1872.

Lancet, The.—The following volumes imperfect:—1839-40, vol. 1; 1840-41, vol. 2; 1847, vol. 1; 1850, vol. 2; 1852, vol. 2; 1859, vol. 2; 1863, vol. 2.

London Medical Record.—Wants index to vol. 1.

Medical News (*Philadelphia*).—Wants all before Jan. 1877.

Medical Record (*New York*).—Wants all before 1880 (vol. 17). Also May 8, 15, June 5, 1880.

Medical Register.—Wanted for 1860 and 1862.

Medical Times and Gazette.—The London Medical Gazette is short of 1837-8, vol. 2. The Medical Times wants vols. 1 to 6, 13, 14, and 18; vols. 15 and 21 are imperfect. Medical Times and Gazette.—1873, vol. 2 imperfect.

Medico-Chirurgical Review.—Wants Jan. and April, 1846, and the whole of 1847.

New Remedies.—Wants all before October, 1873; also Jan. 1874; Oct. 1875; Feb., March, April, 1876.

New York Medical Journal.—Wants the first 16 vols.

Pathological Society of London, Transactions of.—Reports of 2nd, 3rd, 4th, and 5th Sessions (1847-51) wanting; also vol. 9 (1858).

Pharmaceutical Journal.—Wants indices to volumes ending June 1872, and June, 1875.

Progrès Médical.—Wants 1873 and 1874; also 1875, all but July 3, 17, 31; 1876, all but May 20, July 8 and 15. 1877; Jan. 6, May 12, and index wanted.

Ranking's Half-yearly Abstract is short of vol. 56, 1872.

Registrar-General's Reports.—36th, and all after 38th required.

Royal Medical and Chirurgical Society of London, Proceedings of.—Vol. 8 (1880) is short of Nos. 3, 4, 5, and 6.

St. George's Hospital Reports.—All after 10th (1879) required.

St. Thomas's Hospital Reports.—All after 11th (1881) required.

Sanitary Record.—Wants the first three volumes.

Schmidt's Jahrbücher.—Wants all before vol. 169 (1876).

Social Science Association, Transactions of.—Wants the volume for 1867, and all after 1876.

NEW INVENTIONS, DRUGS, &c.

HYPODERMIC POCKET CASE.—The accompanying wood cut illustrates the arrangement of a pocket case



which seems to us to be so eminently fitted for the use of medical practitioners, especially those engaged in

country practice, that we desire to draw particular attention to it. It contains a hypodermic syringe and needles, and, in addition, small bottles containing all the drugs that may be administered *sub cute*, arranged accurately in doses and easily soluble pellets. When required for use a pellet is dissolved in a wine glass with a few drops of water. With this the practitioner is in possession of the most ready means to empty the stomach, to stop hæmorrhage, and to allay pain; besides a host of other remedies. The complete case is so convenient in size that it can be easily carried in the breast pocket. It is sold by Burroughs Wellcome and Co., of Snow Hill, London, E.C.

Miscellany.

"FATHER," answered a fair penitent to the confessor, who asked her name, "my name is not a sin!" The joke has been revived. Auspitz asked a syphilitic client his name. "Doctor," replied he, taking his hat, "Doctor, is my name a symptom?"

MORTUARY RHYMES.—We believe in America it is not uncommon to insert scraps of verse after the usual obituary advertisement. A sorrowing and pious parent in Massachusetts had inscribed the following two lines to the memory of his dead child:—

"We cannot have all things to please us,
Poor little Tommy's gone to Jesus."

A sympathetic reader, mistaking the point of the lament, added the lines:—

"Cheer up, dear friend—all may yet be well,
Perhaps poor little Tommy's gone to hell."

New Books, &c., Received.

The Pathology of Suppurative Inflammations of the Kidney. By JOHN LINDSAY STEVEN, M.B. Thesis for the Degree of M.D. Glasgow: Alex. Macdougall. 1884.—Remarks on the Pathology and Treatment of Renal Nephritis. By JAMES BARR, M.D., F.R.C.S. Reprinted from the Liverpool Medico-Chirurgical Journal.—Report on the Causes and Mechanism of the Cardiac Impulse. By JAMES BARR, M.D. Reprinted from the Brit. Med. Journal, July 26, 1884.—The Human Element in Sex. By Dr. ELIZABETH BLACKWELL. London: J. and A. Churchill. 1884.—A practical Treatise on Disease in Children. By EUSTACE SMITH, M.D. London: J. and A. Churchill. 1884.

THE
BIRMINGHAM MEDICAL REVIEW.
NOVEMBER, 1884.

ORIGINAL COMMUNICATIONS.

ON THE COAGULATION OF THE BLOOD.*

ABSTRACT OF AN ADDRESS DELIVERED BY RICHARD NORRIS, M.D.,
F.R.S.E., PRESIDENT OF THE BIRMINGHAM PHILOSOPHICAL SOCIETY.

IN the various papers which I have had the honour to submit to this Society I have concerned myself mainly with the normal conditions and the development of the blood, and have said only so much respecting its coagulation as would indicate that I was alive to the important *rôle* which the newly discovered discs play in the formation of fibrine. I propose now to commence the consideration of the degenerative changes which occur in these bodies, and the nature of the peculiar coagulation of which the blood is the subject.

The term "fugitive discs," includes the advanced lymph discs, the colourless discs, and all the intermediate forms up to the diffused-edged corpuscles, and also the free nuclei of the white corpuscles.† I desire to show that changes in these bodies are competent to cause the formation of fibrine without the aid of the hypothesis that the liquid of the blood holds in solution fibrinogen and fibrinoplastin which unite under the influence of a

* Delivered at the Opening Meeting of the Society, Oct. 9th, 1884.

† In a paper recently presented to the International Medical Congress at Copenhagen the author has shown that the bodies called hæmatoblasts, piastrine or blutplattchen, are the visible forms of these nuclei.

ferment to form fibrine. At the outset we must bear in mind the truth of Rindfleisch's statement that "recent fibrine is invisible under the microscope owing to its great homogeneity and transparency." It is not therefore strange that this should also be true of the bodies which are its antecedents. It is owing to this circumstance that the early stages of fibrine formation have for so long eluded observation.

Let us first consider the changes in the colourless discs. They are prone to adhere to the cover glass or slide, to spread down and run into pools, and to fuse with each other, so that they form a homogeneous film, like a coating of collodion or gelatine, quite transparent and not to be detected by the microscope so long as it is undisturbed, but which when detached gives rise to a plicated appearance, such as is frequently seen in specimens of shed blood. This occurrence proves that these discs are not decolorised red blood corpuscles. Those who hold that view must prove that red blood corpuscles can melt down to such a homogeneous layer. The fact is the colourless discs are destitute of stroma, and are as liquid though not as limpid as the liquor sanguinis, and cannot retain their corpuscular form when the liquor sanguinis is withdrawn. In this respect they resemble globules of oil in water which spread themselves down on the water being withdrawn. The colourless discs act in this way, even after being stained with aniline blue, but no such change occurs to the red discs. By means of osmic acid vapour, which has the property of fixing the elements of the blood, the corpuscular nature of the material forming this film can be demonstrated. This film formed from these discs is called the sub-layer. By acting on such a film with osmic acid vapour, globules of osmic acid may be seen to condense upon it and to penetrate it so as

to form blebs, which may be seen in various stages of collapse. Solutions of albumen of the same strength as the blood when spread on slides, and treated in a similar way, gave rise to no such blebs, and the condensations evaporated without leaving the slightest trace behind. From these experiments it may be contended that the colourless discs, when undisturbed by motion or agitation, tend to melt down upon the cover and slide to form a homogeneous fibrine layer of a thickness bearing a relation to the thickness of the layer of blood, and the length of time it is allowed to remain in contact. If, however, agitation be maintained, the colourless discs will either attach themselves to the red discs, cementing them together into masses, or will be drawn out into comparatively coarse fibres. This sub-layer forms even when the blood is preserved in a 5-per-cent. solution of sodium sulphate, but is then proportionally thin owing to the dilution.

After the formation of this primary sub-layer, if time be allowed, a secondary *fibrous* layer is deposited: this is derived from the intermediate order of discs. These bodies have the peculiar property of annulation, forming rings or series of rings by vacuolation, the ring rupturing finally at its weakest point to form a curved fibre. If a current is present the ring is elongated or spindle shaped, dividing longitudinally into two slightly curved fibres. These changes are very difficult to see, but they may be followed by means of the recession method, and in bubble spaces. Some of the more stable fugitive discs, both of the large and small variety (hæmatoblasts), do not melt down or annulate into fibres, but remain as nodes or centres from which fibres radiate. The two substances of which the hæmatoblasts are formed (Hayem) re-act differently; the greyish peripheral portion forming a thin layer, while the

green lustrous part gathers itself up to form the node. It is by means of the green, lustrous substance that the fibres adhere to the node. There can be very little doubt that the order of events in the changes of shed blood is that the most primary colourless discs, large and small, fall down and produce the smooth sub-layer upon the glass, that visible hæmatoblasts and the more stable fugitive discs which correspond to them, fix themselves to the sub-layer, that the corpuscles below these in development lay themselves down and undergo annulation in the clear interspaces between the fixed bodies or nodes, producing the general film which is there seen, and which exists all the same where there are no such fixed bodies. In addition to this, the fugitive discs as they swim about form adhesions to the coloured matter of the hæmatoblasts and pull it and themselves out into fibres, and thus spin a network which unites nodal disc to nodal disc by means of radiating lines which become taut and straight as the fibre contracts. The factors in the production of these fibres are adhesion and motion, as may be proved by their absence when vibration is reduced to a minimum and evaporation prevented by surrounding the specimen with oil. The fibres, therefore, have no necessary connection with the nodal discs, which only aid mechanically in their production when motion is present.

The whole of the microscopical teaching from beginning to end affirms the coagulation of the blood and lymph to be concerned with their morphological elements, and shows that it is not necessary to import into the question any ideas of separation, precipitation, or deposition of substances *in solution* in the liquor sanguinis or liquor lymphæ. These remarks refer solely to normal coagulation, and not to experiments with pathological liquids which demand an independent consideration.

The entire process of coagulation as it occurs in the blood may be thus summarised :—

1.—The young discs are insoluble in the liquor sanguinis or in $\frac{3}{4}$ -per-cent. salt solution.

2.—Without any apparent change, save that which induces adhesiveness and viscosity, they become converted into fibres.

3.—These fibres, and the young discs which give rise to them, appear to possess the properties of *plasmine*, for they are soluble in a sufficiently dilute salt solution, say $\frac{1}{4}$ -per-cent., as seen when the corpuscles or fibres absorb vapour in a bubble space.

4.—After a time these fibres become no longer soluble in $\frac{1}{4}$ -per-cent. salt solution, or in aqueous vapour, and this insolubility comes on by continued contact with the liquid of the blood.

5.—This insolubility, which represents the transmutation of plasmine into fibrine, is probably effected by water, which acts by decomposing plasmine and dissolving up the products of this decomposition, viz., fibrinoplastin and ferment.

By those who take the view that coagulation is independent of the morphological elements of the blood, attempts have been made to obtain the liquid part of the blood in a pure state by filtration, subsidence, or centrifugal separation, and the liquid so obtained has the property of coagulating spontaneously at a few degrees above freezing point. Since the researches of Buchanan in 1845, the old notion that fibrine existed as such in solution in the blood has been abandoned. The modern theory is that it is formed by the union, under the influence of a ferment, of *two* substances held in solution. These two substances are supposed to have been isolated by precipitating hydrocele fluid and clot serum ; to the former, the desig-

nation fibrinogen, and to the latter the name fibrinoplastin have been applied. Both these substances are considered to be present in the precipitate obtained by adding solid salt to plasma obtained by subsidence at the ice-cold temperature. This precipitate has been called plasmine.

But the fundamental error which vitiates all these experiments is the erroneous belief that by ordinary filtration or subsidence the whole of the morphological elements of the blood can be got rid of. To obtain absolutely pure liquor sanguinis it is necessary to filter the blood by means of the capillary arrangement which I have called the "barrier method." 1. Absolutely pure liquor sanguinis obtained in this way does not coagulate, nor do any fibrils form in it. 2. When a saturated solution of common salt is added to it, and evaporation allowed to take place till crystallisation of the salt occurs, no precipitate is formed; so that *plasmine* does not really exist in the true liquid of the blood. 3. Finally, plasma obtained in the ordinary manner by subsidence, if submitted to capillary filtration may be separated from the substance which induces coagulation. The same is true of lymph.

Fibrin has no power to produce fibres or networks; this property belongs entirely to plasmine; but plasmine fibres may harden into fibrine in $\frac{3}{4}$ -per-cent. salt solution or in the liquid of the blood. This view of fibrine as altered or decomposed plasmine enables us to understand facts which are otherwise anomalous. Thus Dr. Wooldridge, of Cambridge, finds that there is no ferment substance to be extracted from plasma by the usual methods *till after coagulation has occurred*, from which he naturally infers that it cannot be the cause of coagulation in this case, and if not in this case, why in any other?

How explicable all this is if we regard plasmine as the necessary antecedent of fibrine! It follows that coagulation cannot occur unless this substance is present in its entirety. In bringing together fibrinogen, fibrinoplastin, and so-called ferment, we are ensuring the formation of this substance, and in its decomposition under the influence of water we secure the formation of fibrine, and the setting free of fibrinoplastin and so-called ferment, which may be used to determine coagulation in other liquids in which the chemistry of the plasmine is defective. In this way only can we understand how the ferment can be both a cause and an effect of coagulation.

It is commonly supposed that plasmine must enter into solution before it can be transformed into fibrine. This view is entirely erroneous as may be seen by the following experiment:—Let blood flow into and be thoroughly mixed with a quantity of powdered salt till the latter presents the appearance of red sand; place a quantity of this at the bottom of a tall cylindrical vessel and fill the vessel up carefully with water, allowing the water to run down the side so as to avoid agitation. As diffusion is very slow, the solution of salt at the bottom will be strong and will gradually diminish in strength towards the top. The salt will occlude a large quantity of air and as a consequence small bubbles will ascend and bring up the viscid extensible plasmine which has been precipitated by the solid salt, and which is adhering to them. These threads or strands will be prolonged through the entire extent of the liquid, and as they approach the upper and weaker solution they will lose their transparency, and become white and opaque, will in fact be converted into fibrine; and it is obvious that in no part of their ascent have they entered into solution which would of course involve a breach of continuity. They have

become hardened into fibrine *in situ*, just as the fibres formed on glass slides by the metamorphosis of the fugitive discs become hardened.

In horses' blood maintained at the ice-cold-temperature it is only the red discs which can be removed by subsidence, the colourless discs and white corpuscles remaining suspended in the so-called *clear* plasma. On the other hand, the whole of the morphological elements can be removed from any kind of blood by diluting it with $\frac{3}{4}$ -per-cent. solution of sodium chloride at 0° C., sufficiently to destroy the viscosity caused by the presence of albumen, and maintaining the freezing temperature till subsidence of the capsules has occurred. Under these circumstances we find that the red discs sink first and take the lowest place, the intermediate partially coloured discs next, and the colourless last: above these is a brilliantly clear liquid. Now where does coagulation occur? Not throughout the liquid as it should do if the coagulable material were in solution, but in the upper layer of corpuscles, while the clear supernatant liquid, if removed by a pipette and placed in a separate vessel, shows no disposition whatever to coagulate. This experiment demonstrates in the most unequivocal manner that the material which coagulates is under the influence of gravity and cannot therefore be in solution.

(The address was abundantly and beautifully illustrated by micro-photographic slides shown on a screen by means of a magic lantern. It will shortly appear in the transactions of the Society, in full, with micro-photographic illustrations.)

GOITRE.*

BY JORDAN LLOYD, M.S., F.R.C.S.,
SURGEON TO THE QUEEN'S HOSPITAL.

A LARGE number of cases of Goitre having come under my observation during the past seven years, I venture to lay before this branch a few points concerning them, and these chiefly in reference to their treatment. Before entering into particulars let us have a clear idea of how bronchocele may be best divided, for without this preliminary a proper consideration of their treatment is impossible. I shall adopt the classification for many years in use, and which is very similar to that in the last edition of Holmes' System of Surgery.

Bronchocele may be first divided into (1) Solid, and (2) Cystic.

1.—Solid goitres may be subdivided into (*a*) *Simple*, of which there are two forms—local hypertrophy, and general enlargement. (*b*) *Fibrous*, similarly local or general. (*c*) *Malignant*. Pulsating bronchoceles need not be considered as a special class. Pulsation is a condition only, which each of the above varieties may at any time take on.

2. Cysts may be met with as part of either of the above, or as purely independent developments in a not otherwise affected gland.

Before considering each class separately, a word or two upon acute inflammations of the thyroid may not be out of place. This condition produces a rapidly appearing circumscribed lump in the neck, which rises and falls with deglutition. It has been called acute bronchocele.

* Paper read before the Birmingham and Midland Counties Branch of the British Medical Association, Oct. 9th, 1884.

I think it misleading to designate this condition bronchocele at all, just as it would be to call a mammary adenitis a mammary tumour. I find notes of three such cases, all occurring in private practice. One, in a healthy middle-aged mother, attained the size of a hen's egg, situated in the lower part of the left lobe, coming on after exposure to cold, enlarging for four or five days, painful and tender, and entirely disappearing in three or four weeks, while the patient was taking iodide of potassium and applying iodine locally.

Another case occurred in a robust medical student, about 18 years of age; attributed to injuries received in the football field. The swelling was precisely like the former case and pursued an exactly similar course.

The third case occurred in a healthy old woman, went on to suppuration, and was opened and drained; the resulting sinus discharging for several months. There was dysphagia before the pus was let out, but this never afterwards recurred.

Of exophthalmic goitre it is not my intention to speak. A case seen some years ago in the practice of my father, Dr. John Lloyd, may, however, prove interesting:—A delicate young married lady, 25 years of age, had exophthalmic goitre for many years. Shortly before I saw her the swelling had become much larger and violently pulsating. She complained of buzzing noises in the ears, synchronous with heart's beat. She had distressing palpitation, and was frequently sick. After a few days, vomiting became continuous. She denied pregnancy, and nothing could be found to account for the obstinate sickness. It defied all treatment for nearly a fortnight, when one evening she miscarried with a four-months' foetus and died on the following day. The pregnancy fully explained what had been, throughout, a somewhat obscure and difficult case.

Malignant bronchoceles, either carcinomatous or sarcomatous, are not common. I have seen two cases which are deserving of brief notice.

C. P., a baker, 68 years of age, had a hard circumscribed tumour in right side of neck, pushing the larynx beneath the left angle of the jaw, reaching from jaw to clavicle, and moving with deglutition. It was of six months' duration; growing much faster of late. No dyspnœa, dysphagia, or pressure symptoms of any kind. Had had two or three attacks of what he calls "fainty fits." No surgical treatment was adopted from considerations of, 1st, the age of the patient; 2nd, the absence of pressure symptoms; and 3rd, the uncertainty of its deep attachments. I saw him three months later, when he remained very comfortable, and had persuaded himself it was passing away. About three months after this I heard from his attendant that he was dead.

The second case occurred in a delicate woman 45 years of age. She had a diffused bronchocele for several years which had not given her much trouble. She began to suffer, however, from paroxysmal attacks of cough and dyspnœa, and during one of these she died. *Post mortem* there was found a fungating growth in the larynx which looked microscopically like epithelioma. The malignant tissue was traceable from the larynx to the enlarged thyroid. Whether this malignancy began primarily in the larynx, and extended outwards to the gland, or whether it advanced from gland to larynx, I was unable to determine.

Let us now consider the simple or true hypertrophic variety, and see what are its indications for treatment, and what are its chief dangers. What percentage of people are affected with this form of goitre I have no means of ascertaining. Every practitioner has knowledge of several

such cases. The condition therefore may be described as not an uncommon one. How many of these people suffer seriously from the presence of these tumours? Very few. How many die from them or from their effects? Scarcely any. I dare venture to say hardly 1 in a 1,000.

A local tumour of this simple form is sometimes dangerous when it is situated centrally and low down in the neck, practically behind the sternum. In this situation it may compress the trachea between itself and the bony boundaries of the roof of the thorax. I have seen several of these soft tumours in this situation however, without giving rise to any symptoms. In the softness of such goîtres lies their freedom from danger. General simple bronchoceles, especially in young people, sometimes rapidly enlarge, and when complicated by catarrhal inflammation of the trachea, critical dyspnœa may arise. The following are notes of such a case terminating fatally.

A.P., aged 14, a tall well nourished youth, presented himself at the Queen's Hospital in June last, suffering from difficulty in breathing of a few days' duration. He had a large soft diffused bronchocele, which had only been noticed for four or five weeks. He refused admission, and under protest was treated as an out-patient. A week later he was brought hastily, suffering terribly from urgent dyspnœa which had nearly carried him off before his arrival at hospital. His larynx was immediately opened by my house surgeon (Mr. North), and a tube inserted. This gave no relief, and by this time death appeared inevitable. My colleague, Mr. May, then opened his trachea immediately above sternum, and passed a large catheter down into the chest, through this the boy breathed easily, and rallied considerably in a short space of time. On the following morning he appeared to be doing well, but later in the day he commenced to vomit, and died

somewhat suddenly towards evening, about 30 hours after tracheotomy. *Post mortem* showed an uniform enlargement of the thyroid body, the tumour extending from the hyoid bone to beneath the clavicle and laterally completely across the neck. There was no prolongation behind the trachea or œsophagus. The trachea was compressed from side to side for a space of $2\frac{1}{2}$ inches into a mere slit. Its mucous lining was of a deep red colour, and covered with purulent mucus. Lungs were uniformly collapsed, scarcely containing any air, not more than $\frac{1}{4}$ filling the chest. The connective tissue in the mediastina was highly emphysematous. The heart was contracted and empty. Thymus gland much larger than normal.

Here the immediate cause of death was the free admission of air into the mediastinal connective tissue, encroaching on the cavity of the thorax to such an extent as to leave insufficient room for the lungs to expand. Had this boy come into the hospital at his first visit, and been treated by free local blood letting, secured by setons passed boldly through the growth, I think his life might have been saved. Setons are reported to have given brilliant results even in extreme cases like this. Llewellyn has published cases rapidly relieved by this method, where death appeared imminent. Extirpation of the thyroid in this case would, I think, have hastened his death, rather than have delayed it, even over the short period gained by tracheotomy. An examination of the specimen which is before you will show the obstacles which must necessarily be encountered in complete thyroidectomy. Observe the intimate connection between the gland and the trachea; imagine the tightly stretched hyoid and thyroid muscles which passed over it, and you will realise the difficulties which invest the procedure of securing the superior and inferior thyroid arteries. Bear

in mind also, how intolerant are the deep structures of the neck of surgical interference. Such parts as the vagi and the cervical sympathetic will not tolerate rough handling, and without this, such a tumour, I think, could not have been removed.

Fibrous goitres are usually local or circumscribed ; the entire gland may, however, be uniformly enlarged and hardened. They consist of hyperplasia of the connective tissue of the gland rather than overgrowth of the proper gland substance. They are easily recognised by their hardness, and can only be mistaken for tense cysts. Here diagnosis is cleared up immediately by puncture with a hypodermic syringe. Their gravity depends entirely upon their locality. They are dangerous when situated under the sternum, and also when placed laterally, so as to compress the sides of the trachea or œsophagus. The following case is an example of pressure on the œsophagus. A healthy countrywoman, 45 years of age, was sent to me by a medical colleague, to investigate the cause of a dysphagia of seven years' standing, which had not progressed in severity for two years at least. Her diet during this period had been confined entirely to liquid food. A No. 12 catheter passed with difficulty. Her nutrition was good, and she felt in perfect health. No tumour was visible in neck except during swallowing, and then a swelling could be seen to rise with the larynx, situated on the right side of the trachea. It did not feel larger than half a walnut, was hard and uniform, and was attached in its deeper parts firmly to the air tube. I say did not feel larger, because I think there was a process of the growth behind the œsophagus larger than that appearing externally. Removal of this tumour being a practicable procedure, why did not I recommend it? Simply for the reasons that the patient's health was in no way impaired

nor her life threatened. They certainly would have been had I opened her deep cervical fascia and removed her tumour. This is just the case where increasing dyspnœa or permanent dysphagia would justify removal, but until one or other of these complications may be present, the knife of the surgeon should be elsewhere employed.

Fibrous tumours between the trachea and sternum are amongst the most serious varieties, and their removal is to be regarded as a procedure of considerable danger. In such cases we must open freely the loose connective tissue about the upper aperture of the thorax, and of the risks of this I have already spoken. Besides this entrance of air into the mediastina, we must remember the fatality of purulent infiltration of the same region. My colleague, Mr. Jordan, has emphasised this point in cases of cellulitis commencing in the neck beneath the deep cervical fascia, and I have long regarded it as a cause of death after thyroidectomy. The act of inspiration not only draws air and blood into the chest through natural passages, but through artificial ones when they are unfortunately present. I have treated several cases of fibrous bronchocele by the interstitial injection of iodine with good results. Dr. Mackenzie and Prof. Billroth speak in the highest terms of this method. It is advisable to inject tincture of iodine in its pure form, and it is necessary to introduce the hypodermic needle boldly and deeply into the tumour. Diluted is much less safe than pure tincture because it coagulates the albuminous fluid of the structure less thoroughly, and is therefore more likely to be carried away in the circulating fluids and excite coagulation at a distance from the site of its introduction. Mackenzie uses a solution of iodine in alcohol (1 × 12), and makes two injections weekly, the patient continuing his ordinary employment. Superficial veins are easily

avoided, and deeper ones may be detected by feeling the sulcus in which they lie, or by emptying the vessels by pressing the finger upwards over the growth and observing the sudden entrance of blood into the vessel when the finger is removed.

A few years ago, Dr. Woakes introduced to the profession dilute hydrofluoric acid as an internal remedy for the treatment of bronchocele. He spoke highly of it, and reported a series of what appeared to be successful cases. I have tried it assiduously in eight or ten cases, and have not seen the benefit from it which I had hoped for. Injections of iodine tincture used at the same time have lessened goitres in my hands, and I suspect they had more to do with it than the glass dissolving acid in the practice of others.

Cysts of the thyroid body may neither be tapped nor incised with impunity; their walls are so vascular that free hæmorrhage almost always results. For this reason, Dr. Mackenzie has advised that they should be emptied with trocar and canula, and their cavity immediately injected with 1 or 2 drachms, according to size of cyst, of a strong watery solution of perchloride of iron (25 p.c.), the canula being left in, and the injection repeated if necessary until suppuration is established. They may then be treated like ordinary abscesses. I have seen this plan adopted by my colleague, Mr. Wilders, with perfect success.

When the cyst is very large it is best to try to reduce the quantity of fluid by drawing off a small amount, say 2 or 3 drachms, at intervals of a day or two on several occasions. No attempt must be made completely to empty the sac. I have seen simple tapping followed by the most critical symptoms on more than one occasion, and fatal cases are on record. Mackenzie reported, in a

paper read in the laryngological section at the recent International Congress at Copenhagen, that he had treated 207 cases by his method, and had lost one patient in early practice from entrance of air into a vein during injection. His results had been almost uniformly satisfactory. Billroth treats these cysts by the injection of iodine tincture in a similar way to what is done in the radical cure of hydrocele. He reports that he is satisfied with the procedure, although some of his patients have been very bad after the operation. Schwalbe states that out of 106 cases treated on the continent, 22 suppurated, and 5 died.

Let me in conclusion offer a few remarks on excision of the thyroid body. An acquaintance with the surgical literature of the past 50 years makes one familiar with a ghastly array of catastrophes following this operation. Surgeons have over and over again taken up the subject, have operated right and left, have lost patient after patient and have in the end arrived at the conclusions which their predecessors had previously come to, that *complete* extirpation is rarely, if ever, justifiable. I would here point out that the term thyroidectomy has been used to express two entirely different procedures—1. The removal of the whole thyroid body, and 2, the removal of a circumscribed bronchocele. The former a dangerous and difficult operation and the latter, according to Billroth “a simple matter.” Numerous statistics have been prepared to determine the mortality of thyroidectomy, but in all of them these two unlike procedures have been grouped together. Conclusions drawn from such fallacious figures must be misleading and disastrous. I am indebted to Dr. Mackenzie, who kindly placed his recent paper above referred to at my disposal, for the latest compilation of figures. He says that “until 1850 this operation was

rarely performed, but since that date more than 300 cases have been placed on record. Several sets of statistics have been collected by different authors as follows:—

Date.	Compiler.	No. of Cases.	No. of Deaths.	Percentage Mortality.
1871	Briere	73	23	31
1873	Michel	91	31	34
1876	Bouberger	124	36	29
1877	Sasskund	55 (recent)	9	17
„	Boussier	46 (recent)	8	18
„	„	215 (all dates)	46	21
(?)	Schwalbe	339	69	20
1882	Liebricht	356	69	19

“Taking the practice of individual surgeons even more favourable results may be shown. For example, out of 68 cases operated upon by Billroth between 1877 and '83 there were only five deaths (7.35 per cent.) Kocher, whose remarks are based on an experience of 102 cases gives 5 per cent. as the average mortality and confidently looks forward to still better results as the surgical procedure is made more perfect in its details.” Let me repeat that the whole of these figures relate to excisions of bronchoceles of all kinds, and not solely to complete extirpations of the thyroid.

Apart from death, however, complete extirpation may have remote consequences of a serious nature. Kocher recently succeeded in finding 34 cases which he had previously operated upon, from 16 of them part only of the gland had been removed, whilst complete ablation had been practised in the remaining 18. In the former the results were excellent, but in all the latter a condition of general mental and bodily decay had become established. There was marked anemia with swelling and infiltration of the

skin of the cheeks, nose, and other parts of the face, and sometimes of the body. A condition resembling myx-œdema. In a few of the cases the subjects were adolescents at the time of operation, and in them the operation had been followed by arrest of growth. Zesas, in a paper recently published in the *Arch.f.Klin.Chirurgie*, xxx, 2, entitled, "The removal of the thyroid gland: is it an operation physiologically permissible?" concludes that as it is a proven fact that the regulation of the cerebral circulation is one of the physiological functions of the thyroid gland, complete extirpation is not a permissible operation. Without going quite so far as this, I would say that thyroidectomy, used in its broadest sense, "should never be performed for cosmetic purposes, nor even for relief of urgent dyspnœa, except when less radical measures have failed."

Of other surgical procedures, such as subcutaneous laceration, division of the sterno-mastoid muscle, ligature of the thyroid arteries, or division of the thyroid isthmus, I have no experience.

TWO CASES OF THYROIDECTOMY, WITH REMARKS ON THE OPERATION.

BY BENNETT MAY, B.S., F.R.C.S.,
SURGEON TO THE QUEEN'S HOSPITAL, DEMONSTRATOR OF OPERATIVE
SURGERY AT QUEEN'S COLLEGE, BIRMINGHAM.

MY two cases of thyroidectomy illustrate the extremes in operating—of difficulty and danger on the one hand, of ease and safety on the other.

My first case was that of a woman 42 years of age, who had had an enlargement of the thyroid body for 20 years with but little discomfort. In the summer of 1881 it began to grow rather suddenly and attained an enormous size. She suffered terribly from dyspnœa, with loud stridor, and fearful attacks of convulsive cough. I regarded excision as impracticable, and at no point could I get access to the trachea. One day, finding her almost dying, I tried to reach this tube just above the sternum, but could not find it on account of its deflection from the median line. I therefore cut through the centre of the mass and succeeded in reaching it nearly three inches below the surface of the skin. Then, having introduced a piece of rubber tubing, to serve as a tracheotomy tube, I proceeded to complete the operation by excision of the mass. The peculiarity of the tumour was that it was not encapsuled, but adherent to nearly all the important structures of the neck. There was no bleeding and no vessel of any size. It was probably a case of simple hypertrophy undergoing sarcomatous change. Some of it, where adherent, had to be left behind. She died on the third day of purulent bronchitis and septicæmia.

Now, I do not think such a tumour can be successfully excised. The necessity of simultaneous tracheotomy would probably be fatal, and nothing can be more unsatisfactory than an incomplete operation of the kind, part of the tumour being unavoidably left behind. But was there never a time in its history when it might have been satisfactorily removed? I think there must have been such a period.

My other case is that of the woman you have just seen. She is 38 years old and has had some simple form of goitre for 8 years. My reason for operating was that she was suffering from dysphagia. She began to find difficulty in swallowing about eight months before. There was great difficulty with regurgitation, in the case of liquids, and complete obstruction to solids. The tumour was unilateral, being limited to the right side; it was situated low in the neck, was fairly moveable, and was of medium size, weighing when removed nearly five ounces. I thought it must be compressing the œsophagus, though it is true I could pass with slight resistance a full sized bougie down that tube.

An incision along the anterior edge of sterno-mastoid, and between the sterno-hyoid and thyroid muscles, exposed the tumour in its largest axis, covered by deep cervical fascia. When this was slit up it was very freely exposed, with some dilated veins covering its surface. In removing the gland I simply adopted the plan of separating where I met with least resistance, mostly using the fingers and two pairs of dissecting forceps for the purpose. I also took the precaution to divide no piece of tissue until I had ascertained by inspection that it contained no vessel, or that, if it did, such was first secured between two ligatures. The thyroid arteries were easily seen, and were divided close to the tumour, as recom-

mended by Baumgartner. The last step was to sever the isthmus as far over to the other side as possible, a strong gut ligature being used to secure it beyond the point of division. I did not find anything I could distinguish as a distinct capsule, about which so much is written. There was a thin layer of fascia close on the gland, which I had to divide to get access to the tumour, and the gland itself had certainly an outer layer, but this could not be separated ; it was part of the tumour, and any attempt at removal only caused bleeding. I was at great pains to avert subsequent septic infiltration, by scrupulous cleanliness of everything used, and by sponging with lint in corrosive sublimate solution. When completed the surface was freely dusted with that most powerful of antiseptics, iodoform ; and to secure ample drainage of the lower angle of the wound which dipped down behind the clavicle and sternum, I placed there a piece of iodoform gauze. By occasionally changing this, any accumulation of fluid was prevented. She made a most rapid recovery from the operation, but I must confess that the result, as regards the dysphagia, is somewhat disappointing. She still has some, though a good deal less, difficulty of swallowing, confirming the view which I had also previously entertained, that it might be partly of nervous origin.

This, undoubtedly, was a very simple case, and if slowly and carefully done, such cases I am sure should show a very low rate of mortality ; in fact, there is not much difficulty or danger in the operation under these circumstances.

In considering this subject of excision of the thyroid body we have three lines of enquiry to pursue. One, a question very frequently on the lips, is this—is the operation at all justifiable? Can it ever be right to

attempt the excision of the thyroid body, and, if so, under what circumstances? Then we have to enquire as to the best manner of doing the operation, its difficulties and dangers, and how to avoid them; lastly, the results, if successfully accomplished, both as regards relief of the condition for which the operation was undertaken, and remotely some supposed effects on nutrition.

I answer the first question by another. Is a goitre ever a source of danger to life, and in spite of treatment, of loss of life? Everyone knows such is sometimes the case, and, therefore, unless some minor operation is available, I believe a full affirmative answer may be given to the question. This answer may run counter to a widely entertained feeling, but is certainly justified by facts. Undoubtedly special or exceptional circumstances should exist. Everyone is agreed on that, and nothing less than grave danger to life, impending or prospective, can be accepted as sufficient.

Only a very small proportion of thyroid tumours in this country ever become dangerous to life, and it would be of value if we could predicate such as are about to do so. Some are permanent sources of anxiety, depending partly on position. The worst seem to be those situated low in the neck where they are much compressed, and hard central tumours of the isthmus also give symptoms out of proportion to size. The usual mechanism of danger is by pressure effects—pressure on trachea, œsophagus, recurrent laryngeal, sympathetic, and vagus nerves, and on carotid and jugular vessels. I am now excluding from consideration exophthalmic and other forms of goitre in which the enlargement of the thyroid may be considered as part of a general disease.

Another source of danger is a possible malignant degeneration of the gland, as sometimes happens when

one which has been long quiet suddenly takes on active growth. Without doubt the most pressing indication for an operation is the occurrence of dyspnœa due to compression of the trachea and recurrent laryngeal nerves. In these cases this tube becomes compressed and flattened, usually in a lateral direction, often bent out of the straight line, and adherent to the tumour.

As a result of the low estimation in which any form of operation here is held, the attempt to give relief is often unduly delayed. It seems to be almost impossible to save the life of a patient with asphyxia impending from the cause we are now considering. Laryngotomy is easy, but is too high, as there is nearly always simultaneous occlusion of the trachea. Tracheotomy below the tumour is most difficult of performance, and has special dangers, as of emphysema and septic infiltration of the neck and mediastinum. Besides, relief given after long continued dyspnœa is rarely permanent, the lungs are too much collapsed to reinflate satisfactorily, and death commonly follows from failure of the respiratory powers. I believe this is a common source of failure after tracheotomy generally.

I have had on two occasions to perform tracheotomy for the immediate relief of asphyxia impending from the cause we are now considering. In one of them, done a few months ago, laryngotomy having failed, I passed a large gum catheter down the trachea, and through this respiration was carried on while I was able to open the trachea leisurely and carefully lower down. The youth had every prospect of getting well for a time, but died rather suddenly next day. Here autopsy showed collapsed lungs and mediastinal emphysema.

Nevertheless, this is the operation I would recommend and would perform in similar conditions of urgent suffo-

cation. I would do the very easy and quick operation of laryngotomy, and through the opening thus made would pass a long tube down the trachea for temporary respiration. Having secured this, the attempt may be made to perform tracheotomy lower down, or a method of treatment which is moderately simple, and promises good results, may be adopted. This is the division, or the partial or complete excision, of the isthmus of the gland, whereby the extreme lateral pressure exerted by the lateral lobes upon the trachea may be removed.

A precaution I regard as of some value when operating just here is to keep a stratum of water or weak antiseptic liquid in the wound so as to lessen the risk of entrance of air into veins, or of the occurrence of emphysema during forced respiratory movements.

With such slender prospect of saving life by tracheotomy, I cannot doubt that it will become more common to excise the gland in whole or part whenever symptoms of prospective danger threaten—and every other method of treatment has been proved, after exhaustive trial, powerless to arrest the progress of the disease. On the subject of general treatment of diseases of the thyroid body I do not wish now to touch. When danger is very obvious and imminent, I believe it is getting too late to excise. It is most important, for instance, to avoid the necessity of a simultaneous tracheotomy; this enormously increases the risk by septic complications of the extensive wound. Kocher's and other's experience shows a very high mortality under the circumstances, and I have myself experienced the disadvantages. Moreover, the tumour becomes more fixed and adherent to the trachea and important structures of the neck. There is an enormous difference between removing a loose movable tumour and one which is firmly

fixed and adherent to adjacent parts. I don't think I should operate at all where the tumour seemed fixed and its limits not clearly defined, certainly not in an elderly person if I thought it was undergoing any form of malignant change; and it is scarcely necessary to exclude from consideration cases of exophthalmic and other forms of goitre where the enlargement of thyroid is only part of a more general disease. As a general rule, however, I believe the question of operation may properly be entertained when pressure symptoms, as stridor, wheezing, and convulsive cough, are progressive.

In operating I am sure it is of importance to freely expose the surface of the gland by dividing the thin layer of fascia over it. If this is not done, the operator may easily get into difficulties by endeavouring to dissect up the deep fascia of the neck. I suspect some of the disasters of the operation may be partly due to this cause. I have not met with any distinct capsule which admits of ready separation from the gland.

Again the thyroid arteries presented no special fascial investment, and I found it far better to expose them sufficiently for the easy application of ligatures. The rule, however, about securing these as well as all other vessels between double ligatures before dividing should be rigidly followed.

It is interesting to note the diminishing rate of mortality attending the operation of recent years. Up to 1877 the ratio appear to have been about 40 per cent., but since that date out of a total of 240 recorded cases it has averaged 12 per cent.* But like statistics generally, they leave much requisite information wanting. What necessity for operating existed in each individual case? What

* Sir Wm. MacCormac. Address. Belfast Meeting British Medical Association. 1884.

proportion would have died from their tumour if not operated on? If a majority, then a mortality of 12 per cent. may not be too high; but such would be excessive for the removal of an inconvenience.

On another point of great interest in the operative treatment of diseases of the thyroid body by excision, Sir William MacCormac's remarks are reassuring. This relates to the probable subsequent occurrence of symptoms resembling myxœdema. The bulk of the evidence which he has collected from the practice of the most experienced continental operators goes to show that a fear of this contingency need not deter anyone from performing the operation where the conditions call for it. The experience of operators in this country is far too small to add anything of value to our knowledge of the subject, and it is to the work of continental surgeons, among whom the operation is of far greater frequency, that we must look for further elucidation of the matter.

REVIEWS.

THE ELEMENTS OF PHYSIOLOGICAL AND PATHOLOGICAL CHEMISTRY.*

THIS book helps to supply the want felt by many students and practitioners, of a treatise on physiological chemistry containing a *résumé* of recent English and Continental physiological chemistry. At the same time we cannot give it unqualified praise, as there is plenty of room for improvement. The arrangement, for instance, is inconvenient; and if, instead of commencing with *Nutrition and Food*, and going on to *Digestion and the Secretions concerned*, the *Chemistry of the Tissues, organs, and remaining secretions*, and *The Excreta*, the author had commenced with the chemistry of the tissues and gone on to the other subjects, the reader would have benefited.

Those parts of the book dealing with animal pigments are not up to date, as far as English work is concerned; and the writer is a believer in Thudichum's urochrome. His experience does not coincide with that of Maly, who found urochrome contaminated with urobilin; indeed, Thudichum himself admits that urochrome in acid gelatine gives a bend at F, certainly narrower and less distinct than the band of hydrobilirubin, but no doubt belonging to normal urobilin.

The Chart representing the blood spectra is not accurate. We would especially call attention to V on this chart. No one could recognise alkaline hæmatoporphyrin from it, which spectrum it is supposed to represent. In describing Gmelin's reaction the writer does not lay enough stress on the *spectrum* of this reaction, as by its means we can with absolute certainty say whether bile-pigment is present or not, a remark which does not apply to the colour reaction alone.

Again, in describing the spectrum of bile, he says—

* The Elements of Physiological and Pathological Chemistry : A Handbook for Medical Students and Practitioners, etc. By T. Cranstoun Charles, M.D. London : Smith, Elder, and Co. 1884.

"Perfectly fresh normal bile gives no absorption bands, although ox-gall, even when fresh, is said to give a band between D and E; but when the bile has altered, as by standing for some time, or when an alcoholic extract is used, it becomes dichroic, green in thin, and red in thick layers; also altering in colour through green and blue to a reddish tint, and shows four bands," etc. This is all incorrect. If human had been introduced instead of "normal" in the first sentence, then that sentence would pass, but all the rest of the passage is contrary to facts. The bile of various animals yields a series of bands in the *fresh* condition, and that of the sheep and ox is the only bile which undergoes the colour changes which Charles describes, moreover it gives not only one, but several bands after removal from the animal's body. It is to be hoped that these errors will be corrected in the next edition.

Although the author is careful to give the name of his authority after each statement, there is no reference as to where the statement originally appeared. Although this plan may be grateful to the authority, and may remove the responsibility for the statement from the shoulders of the author, it is no help to the reader, who often wishes to consult the original paper. Hence it is to be hoped that in future editions a bibliography will be added.

On the whole the book is a fair attempt to bring the facts of Modern Physiological Chemistry into a moderate compass.

A SYSTEM OF OBSTETRIC MEDICINE AND SURGERY, THEORETICAL AND CLINICAL.*

DRS. Robert and Fancourt Barnes (father and son) have commenced to write what they intend to be a fairly complete systematic treatise on obstetric Medicine and Surgery: and, if vol. 1, which is the only one as yet published, may be taken as an index of how far they will carry out their intention, we think they are likely to meet

* A System of Obstetric Medicine and Surgery. Theoretical and Clinical. for the Student and Practitioner, by Robert Barnes, M.D., and Fancourt Barnes, M.D. Vol. 1. London: Smith, Elder and Co. 1884.

with considerable success in so doing. The work is marked throughout by a scientific spirit, and is based upon the results of very extended reading, observation and experience. It is no mere compilation of the works of others, as is unfortunately so often the case in publications of this kind.

The first six chapters, including 200 pages, are devoted to anatomy, physiology, and embryology. The latter subject has been contributed by Professor Milnes Marshall, who has treated it with greater clearness than most writers usually do. It is undoubtedly a matter of very great importance that this subject, so far as the latest additions to our knowledge upon it make it capable of being so, should be widely understood not only by physiologists and experts, but by the bulk of the profession; because it is in reality the general practitioners who have so many opportunities of extending our knowledge in this direction. The illustrations of this portion of the work are good, many of them being taken from His.

The latter portion of the book is occupied with chapters on gestation, normal and abnormal; displacements of the gravid uterus; and abortion; whilst the last two chapters relate to the diseases of the embryo and the placenta.

In ectopic gestation the authors speak of "Ovarian," "Tubo-Ovarian," and "Abdominal" gestation in addition to "Tubal." It seems not unlikely that further observation and experience obtained from treatment by abdominal section, will refer all these to the Tubal variety alone, and that the so-called "Abdominal Gestation" will be regarded merely as a further development in later months of the same variety.

The chapter on "abortion" is good.

The subject of "the correlated increase of tension of the arterial system" might with advantage have been treated a little more fully. It is stated that "Fancourt Barnes has studied the subject with care," but we are treated with only five lines upon it.

As is natural, the views held by Robert Barnes in his Lumleian Lectures on the influence of nerve tension in pregnancy and other conditions, are here elaborated, and this should have a beneficial effect in tending to enlarge the views which obstetricians have of their work; making them less of specialists, and more of physicians. Indeed in the preface this is alluded to, where it is con-

tended that obstetrics should not be regarded as a specialty, but as an integral part of the healing art.

When Robert Barnes speaks the obstetric world is always glad to listen; and, throughout, the volume is characterised by the same style of writing that is found in his well known and appreciated work on "Obstetric Operations."

It is scientific in spirit, dogmatic in wording, and betokens the work of a man who speaks because he knows. We shall hail with satisfaction the appearance of the second volume.

THE DIFFERENT ASPECTS OF FAMILY PHTHISIS.*

THIS little book contains the results of a very great deal of work, which will be readily admitted, when we state that it is based on a careful review of the principal features in four thousand cases of phthisis. Dr. Thompson seeks to establish a distinction in broad clinical features between hereditary and acquired phthisis, and then proceeds to enquire into the peculiarities of hereditary phthisis in the two sexes, and as it is transmitted by direct or cross inheritance from parent to child. He holds that his figures show that hereditary phthisis occurs early in life, and affects both sexes equally, is apt to be frequently acute or sub-acute, and meets with little constitutional resistance from the patient. Acquired phthisis on the other hand tends to occur later, affects males more than females, is less frequently acute, and meets with more constitutional resistance. With respect to heredity similar differences of degree are established on the basis of the statistics adduced; the influence of maternal inheritance, and direct sexual transmission being well marked.

The concluding chapters of the book deal with the relations of the subject to life assurance and to marriage, and contain some judicious hints on the maintenance of health by those who inherit a predisposition to phthisis.

* The Different Aspects of Family Phthisis in relation especially to Heredity and Life Assurance. By Reginald E. Thompson, M.D. London: Smith, Elder & Co. 1884

THE GENERAL PRACTITIONER'S GUIDE TO DISEASES AND INJURIES OF THE EYE AND EYELIDS.*

THIS little work is intended as a guide to the busy practitioner who has not time to consult the larger manuals which are before the profession, and which it is in no way intended to replace. It deals briefly with only such of the commoner and more simple diseases and injuries of the eye as all medical men are from time to time called upon to treat. It is sound, reliable, and excellent so far as it goes, and well calculated to serve the purpose for which it has been written. We are glad to find that *lotio plumbi* is not constantly recommended, as by the older writers; but is almost (we wish we could say quite) conspicuous by its absence; moreover, the danger attending its use is pointed out. The treatment, both local and general, recommended under the various headings is rational and good. We think perhaps the author is somewhat too fond of dusting calomel into the eye; but we admit a prejudice against the use of powders of any kind as local remedies in eye diseases.

The advice to use *atropia sulphate*, when this drug is required as an eye drop, we fully endorse, because the alkaloid *atropia* is not very soluble in water without the aid of alcohol, and hence is explained the great smarting and annoyance experienced by the patient if the *liquor atropiæ P.B.* is inadvertently ordered instead of the *liq. atropiæ sulph. P.B.*, which, on the other hand, causes no smarting at all. The mistake in the case of children is most unfortunate.

We are glad to find the author recommending that "every case of supposed cataract, however incipient, should be sent *at once* to a specialist in order that the state of the eye as a whole may be ascertained if possible before the opacity of the lens has developed sufficiently to render the fundus oculi invisible by ophthalmoscopic examination." Since the use of *eserine* has been so much recommended for the relief of glaucoma,

*The General Practitioner's Guide to Diseases and Injuries of the Eye and Eyelids. By Louis H. Tosswill, B.A., M.B., Cantab., M.R.C.S. London: J. and A. Churchill.

we think the advice given to the practitioner not to regard it "as a substitute for an operation" by no means uncalled for. We feel sure that this little book will be much valued by those for whom it is intended, and confidently recommend it to the much-engaged members of our profession.

CORPULENCE AND ITS TREATMENT ON PHYSIOLOGICAL PRINCIPLES.*

EBSTEIN is so well known as a scientific physician, that anything he may say on this subject is worthy of attention. The present volume contains an expansion of an address given two years ago before the Lower Saxon Medical Association at Brunswick. After dealing with the physiological principles of fattening, he says it is after all strictly analogous to the fattening of cattle, and depends upon over feeding. He, however, disputes the current view that fat makes fat; on the contrary, he thinks fatty food protects the albumen and prevents it forming fat. His plan of treatment, therefore, consists in moderating the quantity of food, and while cutting off all vegetable carbo-hydrates, sugar, starch, etc., allowing a moderate quantity of fat, 2 to 3 ounces daily, to be taken. He also suggests that the diet should be monotonous, greasy, and succulent, so as to cause satiety rapidly. He disallows beer, but permits light wines.

The translation is not very elegant, and there are numerous errors; *e.g.*, "psychological" for "physiological," p. 2; "spaded" for "spayed," p. 20; "oxidable" for "oxidisable," p. 35; and many others.

The plan advocated appears rational, and is free from the objection to Banting's method, which is too much like starvation. The following is the diet used successfully by Ebstein in one of his cases:—

Breakfast.—One large cup of black tea—about half a pint without milk or sugar—2 ounces of white bread or brown bread toasted with plenty of butter.

* Corpulence and its Treatment on Physiological Principles. By Dr. Wilhelm Ebstein. Translated from the sixth German edition by Prof. A. H. Keane, B.A. London: H. Grevel, 1884.

Dinner.—Soup, often with marrow ; from 4 to 6½ oz. of roast or boiled meat, vegetables in moderation, leguminous preferentially, and cabbages. Turnips were almost and potatoes altogether excluded. After dinner a little fresh fruit. For second course, a salad, or stewed fruit without sugar. Two or three glasses of light wine, and immediately after dinner a large cup of black tea without milk or sugar.

Supper.—A large cup of black tea, as before. An egg, a little fat roast meat, or both ; or some ham with its fat, Bologna sausage, smoked or fried fish, about 1 ounce of white bread well buttered, occasionally a small quantity of cheese, and some fresh fruit.

On this diet the patient lost 20 pounds in six months.

Ebstein insists on the necessity of keeping to the restricted diet always if the tendency to corpulence is to be successfully combated.

A PRACTICAL INTRODUCTION TO MEDICAL ELECTRICITY.*

ON the subject of Medical Electricity, Dr. de Watteville writes as a master in all that concerns its scientific and technical principles, and no one who desires to gain a proper insight into this important department could possibly choose a better guide. His method of describing a series of simple experiments to be performed by the student upon himself is likely to prove instructive and is a useful departure. Dr. de Watteville takes a more moderate view of electro diagnosis than has been expressed by some recent writers, and carefully points out the many sources of fallacy that exist, and the difficulty of drawing positive conclusions from the electrical phenomena alone. In electro-therapeutics he is more sanguine. This part of the book is very full, and the general directions are full of good sense. The treatment of special diseases reminds us that there is "nothing like leather," even cerebral hæmorrhage and softening being regarded as amenable to the electric fluids. By the way, we do not think that Schott of Naüheim has made out

* A Practical Introduction to Medical Electricity. By A. De Watteville, M.A., M.D., B.Sc. Second Edition. London : H. K. Lewis. 1884.

his claim to have originated the mode of treating writer's cramp practised by Wolff (see a recent paper by Wolff, in *New York Med. Record.* 1884.) The book is completed by a set of plates giving Ziemssen's motor points. It is well illustrated and carefully printed.

THE DISEASES OF THE NERVOUS SYSTEM.*

THE chorus of praise with which this book was met by reviewers on every side has been more than justified by the demand within two years for a second edition. It is one of the most remarkable evidences of the tendency of modern scientific medicine, that an important, and lengthy work on the obscure study of nervous disease should be so quickly appreciated by the medical profession. In two large volumes Dr. Ross has given us the most complete and exhaustive account of current knowledge on this subject. The reader is impressed throughout with the mastery of the subject displayed by the author, and his original view and grasp of the whole question.

The first volume is devoted to the study of the general pathology of the nervous system, the diseases of the peripheral nerves and those of the sympathetic system. While the second deals with the special pathology of the spinal cord, medulla oblongata, and encephalon. At the end of the second volume the diseases of the encephalo-spinal system are discussed. While evidently thoroughly devoted to his subject, Dr. Ross has dealt with it throughout in a spirit of severest and most critical enquiry, and we are glad to find that, while, as in the case of Addison's disease or diabetes mellitus, inclining himself to a nervous causation, he refuses, in the present state of our knowledge, to consider them at length in a special book on diseases of the nervous system. The two volumes are profusely illustrated and well printed, and Dr. Ross may certainly be congratulated on having given to the medical profession a most valuable and complete monograph.

*The Diseases of the Nervous System. By James Ross, M.D., Manchester.

MANUAL FOR MIDWIVES.*

WE have received the second edition of the Manual for Midwives, by Dr. Fancourt Barnes. That it has so speedily reached a second edition is the best proof of its utility.

THE MEDICAL CHRONICLE.

UNDER the above name our Manchester brethren have brought out the first volume of a monthly magazine of medical science, which it is intended to publish henceforward in their city. This number contains an article on Tests for Albumen in the Urine, by Dr. W. Roberts; one on Lung Implications in Diabetes, by Dr. Drischfeld; and other papers, by Mr. Hardie, Dr. Robertson, and Dr. Ashby; but the main feature of the number is the excellent chronicle of nearly 100 pages devoted to special sections on Medicine, Therapeutics, Surgery, Midwifery and Children's Diseases, Physiology, the Diseases of the Eye, Skin, Ear, and Throat, and Forensic Medicine and Toxicology. These abstracts are very full, and very well prepared.

We can only say that if Manchester can keep up to the standard of this number the Medical Chronicle will be a great credit to the town, and will speedily make an honorable place for itself in periodical medical literature.

* Manual for Midwives. By Fancourt Barnes, M.D., M.R.C.P. London: Smith, Elder, and Co.

MEDICAL NEWS.

OBSERVATIONS ON A DECAPITATED HEAD.—We transcribe from the *Revue Scientifique*, July 5th, the principal part of a paper by Dr. Petitgrand, giving an account of the observations he had the opportunity of making upon an Annamite who was decapitated at Saigon, in 1875, an account characterised by the editor of the *Revue* as highly important, as furnishing the most precise evidence of the presence of consciousness after decapitation that exists. The man executed was a pirate of robust frame and brave demeanor, and M. Petitgrand concentrated his whole attention upon him. He was placed in a kneeling posture, strongly attached to a solid post in front of him, with the head and neck voluntarily and strongly flexed. The place for the blow having been marked with betel-juice, the head was struck off at one blow by means of a long sword having a broad blade—the procedure to be properly carried out requiring great address on the part of the executioner, and much *sang-froid* on that of the culprit. When this is the case there is of course far less contusion and concussion of the spinal cord than with the guillotine; and, therefore, so far a greater possibility of an ulterior manifestation of the functions of the encephalon. During the preparations, Dr. Petitgrand never withdrew his eyes from the culprit, placed at two meters distance only, and with whom he more than once exchanged looks. The head fell within a meter and a half from him, without, as ordinarily, rolling away, and the divided part of the neck resting on the sand, the hæmorrhage which ensued was very slight. At this instant he was startled at finding the eyes of the head steadily fixed on his own, and not believing that this could be an act of consciousness, he rapidly described a quarter of a circle around the head which lay at his feet, and saw plainly the eyes following this movement. He now returned to his former position, but more slowly, and the eyes followed him for “a very short instant,” and then suddenly ceased to do so. At this moment the face expressed manifest anguish, the poignant anguish of a person in a state of acute asphyxia. The mouth opened violently, as if to

take a last gasp of respirable air, and the head, thus displaced of its equilibrium, rolled on its side. This contraction of the maxillary muscles was the last manifestation of life, a period of from fifteen to twenty seconds having elapsed since decapitation. From these facts Dr. Petitgrand draws these conclusions:—(1) That the head separated from the body is in possession of all its faculties as long as the hæmorrhage is restrained within certain limits, and that the proportion of oxygen dissolved in the blood is sufficient for the maintenance of the nervous function, that is for a short period, which, in any case, would not exceed half a minute. (2) That the repeated convulsive movements of the lower jaw, after the head has become detached—movements which, without doubt, have given rise to the expression, “biting the dust”—are nothing else than the habitual reflex movements of the face in acute asphyxia. These can not be absent when the little blood contained in the decapitated head flows away or becomes disoxygenated; and are caused by the sensation (probably conscious) of the want of necessary oxygen in the blood remaining in the encephalon. On the present occasion Dr. Petitgrand had no opportunity of observing the trunk of this beheaded man; but he has had opportunities of observing it on other occasions, and has always noted the following circumstances:—The head once detached, the trunk (the body being attached by cords to the post is unable to fall) suddenly assumes the vertical position, columns of arterial blood springing up to a meter or more in height. This straightening of the trunk, and the jets of blood being simultaneous, are in fact related to each other as cause and effect; for at each new systole, manifested by the projection of a column of blood, the trunk is raised, to bend again immediately. The jets soon do not ascend to more than a few centimeters, and the movements of the trunk are reduced to mere oscillations. After from twelve to fifteen systoles all the blood is evacuated and the trunk remains motionless, and as it were suspended to the post, which prevents it falling to the ground. Dr. Petitgrand has never noticed any elevation of the ribs or sinking of the epigastrium, or any other sign of an attempt at respiration. The heart seems to continue to live awhile its own proper life, as is shown by its violent systoles, which are capable of effecting the stretching of the trunk.—*Medical Times.*

A CASE OF CYANOSIS.—Dr. W. R. Harper reports the following case :—Infant S., born July 10, 1884, at 7-30 a.m., apparently healthy ; breathing and general appearance normal. On the following day—3 p.m.—the child was taken suddenly ill with marked cyanosis. The patient was treated with mustard baths, whisky and digitalis. without any appreciable effect upon the cyanosis. Electricity was also used to excite the phrenic nerve without any benefit. The temperature at first was 99°, then 98°, 97°, 96°, and finally 95° at death, which took place at 6 p.m. *Post mortem* appearances :—All that was found at the upper heart was the right auricle with the superior and inferior vena cava, coronary valve at mouth of vein, the auricular appendage overlapping the aorta of the lower heart, the left ventricle with the mitral valves. This ventricle communicated with right auricle through the auriculo ventricular opening. The pulmonary artery arose from the aorta. The pulmonary veins emptied into vena cava. There was effusion into all the serous cavities. Weight of the heart, eight drachms ; and as will be seen from the foregoing account there were only two cavities to the heart.—The Medical Herald.

LIVER SPOTS.—In an article on tinea versicolor, or liver spots, the Medical and Surgical Reporter says :—The treatment is not difficult. The sulphur preparations are all useful, such as sodium hyposulphite, one drachm to the ounce of water, or Vleminckx's solution, which is prepared as follows :—Quicklime, one half-ounce ; flowers of sulphur, one ounce ; water, ten ounces. Boil down to six ounces and filter. Perfume with oil of anise. This may be used diluted with four to eight parts of water, to be dabbed on the patches after a bath with soap and water. At the end of a week scarcely a sign of the disease will remain, and at the end of two weeks a cure may be effected. The result depends largely on the manner of making the application.

TINCTURE OF BENZOIN FOR CHAPPED HANDS, ETC.—At a recent meeting of the Philadelphia Co. Medical Society, Dr. Carl Seiler called attention to the value of tincture of benzoin in the treatment of chapped hands and chilblains. He has used it in a number of cases with much success. It is applied by simply painting it on the skin. The stocking may be prevented from sticking to the feet by rubbing some oil over the benzoin.

RUPTURE OF THE AORTA DURING LABOUR.—Heinricius reports in the Arch. de Tocologie a case of a woman who, during labour, was suddenly attacked with a convulsion, became comatose and died. A *post mortem* examination showed a rupture of the aorta a short distance above the sigmoid valves, due, it was thought, to the increased blood pressure caused by the strong contractions of the womb and the abdominal walls.—St. Louis Medical and Surgical Journal.

PITRES ON CLITORIDIAN CRISES AT THE COMMENCEMENT OR IN THE COURSE OF LOCOMOTOR ATAXY.—Pitres (Le Progrès Med., 1884, No. 37) relates three cases of locomotor ataxy in which voluptuous crises, exactly resembling coitus, had been or still were present. This symptom was first described by Charcot and Bouchard. Trousseau has described seminal emissions in men under similar circumstances, and the phenomena may be compared. Pitres thinks such crises have a great diagnostic value, and suggest tabes even in the absence of any other sign of spinal disease; and when other symptoms are present, such as absence of tendon reflex, visceral crises, lightning pains, ocular troubles, a diagnosis of tabes is justifiable, though no motor inco-ordination is present.

SCHROTTER ON THE TREATMENT OF AORTIC ANEURISMS.—(Deutsch Arch., vol. xxxv., p. 139.)—Schrotter recommends the introduction into the sore of the aneurism a peculiar kind of silk called *Fil de Florence*, which is drawn from the silk worm just before the chrysalis stage. This is a modification of the plan of introducing fine iron wire into the sac.

LOCAL TREATMENT OF FACIAL ERYSIPELAS.—Dr. Schallenberger states that for several years he has employed a mixture of salicylic acid, one drachm, glycerine and rosewater of each half an ounce, which he applies by means of a camel's-hair pencil frequently and thoroughly to the affected parts, taking care to cover well beyond the line of demarcation. He has a record of quite a number of cases so treated, and in every instance the first or second application has been sufficient to check the spread of the disease. The only internal treatment was saline water or mixture.—Philadelphia Medical News, April 5th.

PROPERTIES OF KAIRIN.—Dr. Crook of the Post-Graduate Medical School, New York, in a paper published in the Philadelphia Medical News, March 22nd, states that the investigations thus far made with regard to Kairin justify the following conclusions:—1. It is a decided febrifuge, rapid though somewhat fugacious in its action. 2. It diminishes the frequency of the heart's action to some extent, though the pulse-rate does not fall *pari passu* with the temperature. 3. The symptoms of collapse—cyanosis, cold extremities, &c.—may be entirely or in a large degree avoided by close attention and the proper use of stimulants. 4. It is a tolerably constant diaphoretic. 5. Its action in intermittents, though not fully tested, warrants the belief that it possesses valuable antiperiodic properties, and as such should be carefully investigated. 6. Though it may not be found to possess all the properties of the alkaloid quinia, enough has been learned of its action to justify the hope that a perfect substitute may yet be found, and to inspire us with renewed confidence in the resources of organic chemistry.

DR. W. JACOBY ON THE NEUROTIC AFFECTIONS WHICH ACCOMPANY JOINT LESIONS.—Dr. Jacoby (Louisville Med. News, Jan. 26, 1884), says he has seen thirty cases of paralysis affecting limbs after joint affections, and specially involving the extensor muscles. The following is a case in point:—Mrs. L., age twenty-four, while walking, slipped and fell, striking her right knee. The joint rapidly increased in size and was very painful. The following day it was very much enlarged, the patella was pushed forward, and fluctuation was distinctly noticeable. The joint affection improved rapidly, but upon the seventh day a distinct paralysis was noticeable. The movement of flexion of the leg upon the thigh was easily executed, but that of extension was attended with great difficulty. Patient could only by the strongest effort produce any contraction of the triceps cruris. As the effusion became absorbed, the paralysis increased, and at the end of three weeks it was impossible for her to extend the leg at all. Atrophy was now well marked, showing a difference of three centimeters in favour of the healthy limb. The gluteal muscles were also involved. The electro-contractility of the muscles was decreased to both currents. For treatment he recommends massage and hydrotherapeutics as preferable to electricity.

PURE DRINKING-WATER.—We are favoured in Birmingham with a good supply of water from our Corporation mains, but at times, owing to want of storage, it is more or less turbid from the suspension of inorganic detritus, which, though not injurious, is objectionable for drinking purposes. We are glad, therefore, to draw attention to the remarkable artesian well in Digbeth, which has lately come into the possession of Messrs. James Goffe and Sons, Mineral Water Manufacturers, of Duke Street. We owe this well to the enterprise of Mr. Clark, a London engineer, who was engaged some years ago in certain sewer contracts for the Corporation, and met with such an abundance of water that he determined to form an artesian well. He acquired a lease of the land, and after several borings finally succeeded in reaching water at a depth of 400 feet. This well gives out water at the rate of 3,000 gallons per hour, at the uniform temperature of 50°. The bore is only four inches in diameter, and is cased throughout its whole depth with two sets of tubing. Dr. Bostock Hill has reported most favorably upon the freedom of the water from organic impurities. It is eminently fitted for making aerated waters of the best class, and Messrs. Goffe may be congratulated on the possession of a well which fulfils so thoroughly all that the best sanitarians desire in drinking-water.

THE EDINBURGH CLINICAL AND PATHOLOGICAL JOURNAL.—We regret to announce that this ably conducted journal has ceased to exist. There is surely room for another medical publication in Edinburgh, and we should be glad to see it take the shape of a special journal devoted to morbid anatomy and pathology, of the want of which Dr. Greenfield complained at Belfast. A very little money and a good deal of hard work are all that are needed to keep a medical journal afloat in these advertising times. *Experientia docet.*

PARALDEHYDE.—This hypnotic has now had a fair trial, and a good many observers have published the results of their experience. As a rule, they speak well of its effects, when employed in doses of 5 or 6 grammes (about 1½ fluid drachms). Ranke, on the contrary, complains that it is disagreeable to take, and inefficient. Our own experience of the drug is limited, but is not favorable. At present its expense prohibits its routine use.

DIABETIC COMA.—Dr. O. F. Rogers (Boston Med. and Surg. Journal, Vol. cxi., No. 13) relates the case of a gentleman, aged 44, in previously good health, who was seized with acute tonsillitis, which improved, but his general condition got worse. On examination his urine was found to be of sp. gr. 1035, and contained 8 grammes of sugar to the ounce. The next day he became comatose, breathing deeply and loudly. His urine gave the so-called acetone reaction with ferric chloride. The breath smelt like hay. The breathing became irregular; cynosis appeared; and he died at 5 p.m., twenty-two hours after coming under observation; and less than six days after his exposure to cold. No *post mortem* examination was made.

ANDERSON ON PYELOLITHOTOMY.—Mr. Anderson read a paper at the Clinical Society (Med. Times, 1884. Vol. I, p. 744), in which he described a successful operation for renal calculus. The patient had hæmaturia and pain in the left loin, the urine contained uric acid but no pus. The kidney was reached by an oblique incision in the loin and the calculus removed, a drainage tube was inserted, and the patient made a good recovery. Urine was not passed through the wound after the first 12 or 18 hours. The calculus weighed 60 grams and consisted chiefly of calcium oxalate. The incision to extract the stone was made through the membranous wall of the pelvis, not through the kidney substance, as less likely to cause hæmorrhage. *Birmingham Med. Review*

WELLS ON THE REMOVAL OF TWO SOLID CIRCUM-RENAL TUMOURS.—Sir Spencer Wells (Brit. Med. Journal, 1884. Vol. I, p. 758), has recently removed two solid tumours from around the right and left kidneys of a lady who subsequently made a good recovery. One tumour weighed 16½ lb., and the other 14½ lb. These were composed mainly of adipose tissue, but in part of delicate connective tissue, fibro-lipoma. In Prof. Virchow's late address at Copenhagen on Metaplasin, he explains the relations of adipose tissue to this delicate almost mucous connective tissue, out of which it is normally developed.

KEPHIR OR COW KOUMISS.—This is the name of a drink lately introduced in Russia, made by fermenting cows' milk. The ferment can be obtained from Russia, and the drink is said to possess the therapeutic properties of Koumiss.

PAYNE ON THE EARLY USE OF ANTIMONY IN SURGICAL CASES.—Dr. Payne (the *British Med. Journal*, 1884, vol. I., p. 1041), recommends the early use of antimony in surgical cases to check congestions, and so obviate inflammation. He gives two cases of fractured ribs, and one of fractured pelvis and thighs so treated, and he believes that he succeeded in preventing pleurisy and pneumonia in the two former, and peritonitis in the last case. In none of the cases did the temperature rise above 100° F.

THE ILLNESS OF THE POET BURNS.—Mr. W. H. Whitsitt writes to the *Louisville Medical Times* to endeavour to elicit an opinion as to the real nature of the complicated malady under which the Scottish poet suffered so severely, and finally died. As the symptoms from which he suffered were palpitation with dyspnœa, and as he suffered from at least one attack of acute rheumatism, it seems quite the most probable view that he had a rheumatic affection of the heart, probably of the aortic valves. His death, which was sudden, and apparently from syncope, further supports this view. As he died on July 21st, 1796, at a time when neither the practice of auscultation nor the connection between rheumatism and heart disease were known to the profession, it is not surprising that his symptoms were not attributed to their real source.

DROPPING FLUIDS INTO THE EYE.—We had but recently the opportunity of watching the dropping of a borax solution into the eyes of a child suffering from catarrhal conjunctivitis. The child cried vehemently, for the physician opened the lids with his fingers and thus dropped the fluid into the eye—a procedure, if not painful, at least very disagreeable. It may, therefore, not be amiss to mention the following by far better method: the inner corner of the eye is first cleaned from all impurities, and then thoroughly dried. While the child is in the recumbent position, the eye is kept closed. One or two drops of the fluid indicated in the case are then dropped into the corner. When the child opens the lid, the drops flow slowly into the eye. Should the child be asleep, or not at once open the eye, the operator needs but slightly to separate the eyelids, when the drops will immediately enter.—(Editorial) *Med. and Surg. Rep.*, July 5th.

PEPTONURIA AS A SYMPTOM OF DIFFERENT DISEASES.

—The following conclusions, taken from the work on this subject by Dr. Fenomenow, have great importance for the practising physician:—1. Peptonuria always occurs in the final stage of croupous pneumonia, and is in direct relation to the absorption of the croupous exudation. 2. The presence of peptone in the urine in cases of nephritis is perhaps dependent on the peptonisation of the tube-casts. 3. In pulmonary phthisis, the peptonuria is dependent not upon the extent of tissue implicated, but upon the rapidity of the destructive process. 4. In typhoid fever accompanied by constipation and a temperature above 40° C., peptonuria is a frequent appearance. 5. Occasionally peptonuria occurs in scarlet-fever, in exudative pleurisy, in nephritis, in puerperal disease, and in disturbances of compensation in heart diseases.—Phila. Med. Times, June 28th.

SHRINKING TONSILS.—Dr. Chisholm, when not allowed to amputate hypertrophied tonsils, shrinks them in the following manner:—A fine piece of wire, roughened at the end, with a thin layer of absorbent cotton twisted upon it, is dipped in a saturated solution of chloride of zinc. This is plunged into a number of the follicles at each sitting. A very few applications will cause the gland to shrink. This method is much less painful than cauterizing the surface of the tonsil. Dr. Chisholm does not mention the galvano-cautery in his communication. In our opinion this would be a much neater, more efficient, and less painful means of attacking such hypertrophies through their follicles. However, as chloride of zinc is easier to procure than a galvano-cautery, Dr. C.'s method has much practical value.—Virginia Med. Mo.

MIRY-ACHIT.—Dr. W. A. Hammond, describes a curious disease observed in Siberia, the prominent symptom of which is an irresistible tendency on the part of the sufferer to imitate any sudden action on the part of any person who attracts his attention.

VINEGAR AS A HÆMOSTATIC.—Dr. Grigg recommends a wineglassful of vinegar as a simple and very efficacious means of checking *post partem* hæmorrhage.

VACCINATION AND THE RECENT EPIDEMIC OF SMALL-POX.

AT the meeting of the Dispensary and Vaccination Committee, held September 11th, 1884, Mr. Rust, Vaccination Officer, presented the following report:—

Parish Offices, September 11th, 1884.

To the Members of the Dispensary and Vaccination Committee.

Gentlemen.—The following return shows the number of cases admitted from the commencement of the epidemic in May, 1882, to July 10th, 1884, this being the last date of an admission of a case in the town.

During the period 1,591 cases of Small-pox were admitted into the Borough Hospital, of this number the returns show 1,384 vaccinated, and 207 not vaccinated. Of the total number sent to Hospital 149 died, 59 of these deaths occurring in vaccinated persons, and 90 in unvaccinated, representing an average of 43 deaths in each hundred of the unvaccinated, against a trifle over 4 deaths in the hundred of the vaccinated cases. In entering these cases from time to time, I have repeatedly noticed both Drs. Bates and Line have drawn attention to a large number of very imperfect vaccinations.

For a period from June 20th, 1883, to July 10th, 1884, we have analysed the admissions to show the efficacy of successful vaccinations.—Vaccinated cases, 1082; Unvaccinated cases, 232; Total, 1314. Analysis of marks in deaths:—1 mark, 9; 2 marks, 20; 3 marks, 18; 4 marks, 2; 5 marks, nil.

Analysis of marks on total number of persons vaccinated—admitted during the above period—and death percentage:—

Marks.	No. admitted.	Total deaths.	Death percentage.
1	129	9	under 8
2	294	20	„ 8
3	359	18	„ 6
4	193	*2	„ 1
5	107	nil.	nil.

* Of these 2 deaths, 1 had bronchitis, age 34, the other aged 19, hæmorrhage.

In no case during the epidemic, was it known that a re-vaccinated person died, certainly not one re-vaccinated at the public stations.

Obituary.

THOMAS CHAVASSE, F.R.C.S.

WE regret to record the death of Mr. Thomas Chavasse, of Wylde Green House, which took place on October 19th, in his 84th year. Mr. Chavasse was one of a family which has evinced in no small degree a peculiar aptitude for the practice of our profession, and which, perhaps found its most successful representative in the subject of this notice, who is generally credited with having been engaged in the largest general family practice in Birmingham, or perhaps in the provinces. Mr. Chavasse was born at Walsall in May, 1800, and at the age of 16 became a resident pupil at the General Hospital. At the expiry of his apprenticeship he studied at St. Bartholomew's Hospital, where he attracted the attention of the famous Abernethy, then in his prime. On his return to Birmingham, in 1822, he commenced to practise, and soon attained success. In 1850 his health failed, and he retired to Leamington. Three years later he purchased property at Wylde Green, and recommenced practice in Birmingham, paying, we have heard, a large fine to his late partners, for the privilege of doing so. He speedily established a large county connection, becoming medical attendant to the best families round. He used to attend two days a week in Birmingham to see patients at rooms which he occupied for many years at the corner of the Minories. This active life was pursued until his eightieth year, when the infirmities of age became first really marked.

Mr. Chavasse never took a prominent part in public affairs; though he was a member of the Sutton Coldfield Corporation, and three times its Warden. He was appointed "Capital Burgess," but finding its duties distasteful to him he resigned his seat on the Bench. He was one of the original members of the British Medical Association, and was for many years a trustee of the Medical Benevolent Society. He was twice married and leaves ten surviving children, one of whom, Mr. T. F. Chavasse, is the well known surgeon to the General Hospital.

Mr. Chavasse's career was a remarkably successful one, but even to those who knew him only late in his life, as a wise and kindly old man, this success was no mystery. Gifted with sympathetic manners, capable of identifying himself with his patients, and indefatigable in the pursuit of his practice, success came to him as it will come to all others who possess the power to follow in his footsteps. But such a combination of qualities possessed in the degree he held them are rare. Such men are rare as first-rate men are rare in all the walks of life. It is a peculiar combination that makes up the thoroughly efficient and successful family practitioner, but such a one in the most eminent degree was the respected subject of this brief sketch.

Miscellany.

Miscel

FRESH-AIR CHILDREN.—In America, it seems, there exists the commendable practice, not unknown in this country, of organising trips to the country for poor children of great cities, and it has obtained the name of "fresh-air" philanthropy. An American journal relates the following story *apropos* of this custom :—"Among the young waifs brought out from the city a young lad stood looking at the circus pictures when a couple of ladies came up, and one of them, pointing to the boy, said, 'that is one of the "fresh-air" children.' The other lady remarked, 'He looks as though he might be ; I'll speak to him.' So she said, 'My boy, are you one of the "fresh-air" children?' 'Well,' he replied, 'not so very d—d fresh.' Which ended the dialogue."

Birmingham Med. News

SOME DUBIOUS ADVICE REGARDING THE CHOLERA.—A French doctor being applied to by his mother-in-law for a receipt to keep off cholera, recommended the following prophylactic regimen : Sit for a quarter of one hour night and morning in a strong draught ; drink at each meal a bottle of adulterated wine ; eat two green melons at breakfast and the same quantity at dinner ; walk in the sun with the head uncovered for an hour every noon. Get yourself into a violent perspiration, then drink a pitcher of ice-water and sit in the cellar in a chemise ; drink ice-water every hour that it is hot ; worship Venus night and morning. If you have any early symptoms of cholera don't believe it.

New Books, &c., Received.

On Sclerosis of the Spinal Cord. By JULIUS ALTHAUS, M.D. London : Longmans and Co. 1883.—Some Important Points Connected with the Surgery of the Urinary Organs. By SIR HENRY THOMPSON. Student's Edition. London : J. and A. Churchill. 1884.—Clinical and Pathological Observations on Tumours of the Ovary, Fallopian Tubes, and Broad Ligament. By ALBAN G. DORAN. London : Smith, Elder, and Co. 1884.—The Elements of Physiological Physics. By J. MCGREGOR ROBERTSON, M.A., M.B., C.M. Cassell and Co. Limited. 1884.—Modern Operations in Cataract. By R. BRUDENELL CARTER. London : Macmillan and Co. 1884.—Micro-organisms and Disease. By E. KLEIN, M.D., F.R.S. London : Macmillan and Co. 1884.—Report on the Sanitary Condition of the Borough of Birkenhead for the year 1883. By FRANCIS VACHER, Medical Officer of Health. Birkenhead : Willmer Bros. 1884.—Notes on Materia Medica and Pharmacy. By FRED T. ROBERTS, M.D., B.Sc., F.R.C.P. London : H. K. Lewis. 1884.—A Handbook of Diseases of the Eye. By HENRY R. SWANZY, M.A., M.B. London : H. K. Lewis. 1884.—The Condition of Gaols, Hospitals, and other Institutions, as described by John Howard. By JAMES BLAKE BAILEY. London : H. K. Lewis. 1884.—On Diseases of the Rectum and Anus. By HARRISON CRIPPS, M.B. London : J. and A. Churchill. 1884.—The Use and Abuse of Pessaries. By GEO. GRANVILLE BANTOCK, M.D., F.R.C.S. Ed. Second Edition. London : H. K. Lewis. 1884.—Handbook of Midwifery for Midwives. By J. E. BURTON, M.R.C.S., L.R.C.P. Second Edition. London : J. and A. Churchill. 1884.—Dental Caries, a Critical Summary. By HENRY SEWILL, M.R.C.S., & L.D.S. Eng. London : Baillière, Tindall and Cox.

THE
BIRMINGHAM MEDICAL REVIEW.
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ORIGINAL COMMUNICATIONS.

AMERICAN NOTES.*

BY LAWSON TAIT, F.R.C.S.,
CHAIRMAN OF THE PATHOLOGICAL AND CLINICAL SECTION OF THE
BIRMINGHAM AND MIDLAND COUNTIES BRANCH OF THE BRITISH
MEDICAL ASSOCIATION.

A TRIP across the Atlantic has now been made so slight an undertaking that it certainly cannot be the subject of a paper such as might have been written some 20 or 25 years ago, yet it seems that so few of our medical brethren on this side of the world take advantage of the facilities for the journey that it is quite possible I may be able to say something of interest to you about it. This is the more likely to be the case as I undoubtedly was favoured with most exceptional opportunities of meeting my professional brethren during my brief stay in America. I saw them under all kinds of circumstances: in their hospitals, in their class rooms, in their private practice, and in their domestic circles to the fullest advantage. They come over here in numbers, so large that I had gained an impression that they must be a much richer body than we are, for it certainly is a very unusual thing in this country to find a practitioner, however eminent,

* Read October 31st, 1884.

taking a voluntary holiday for three or four months, or even so long as a year, yet we find this is quite a common luxury amongst our transatlantic brethren. I felt a considerable amount of curiosity upon this subject, and therefore, I made enquiries, the result of which quite convinced me that this practice has not its origin in greater wealth or more freedom from competition ; on the contrary I found that it springs from an earnest and laudable desire to extend their knowledge and increase their powers of usefulness, that they may thereby stand higher in the estimation of their clients. They have in America institutions which are quite unknown in Europe, called post graduate colleges, and in this they seem to me to recognise to a much greater extent than we do, that after graduation a doctor's medical education is just about to commence. Thus in New York there is a large institution called the "New York Policlinic," a school of clinical medicine and surgery for practitioners. It is described as "an institution in which there are didactic lectures given," practitioners only being admitted, and the class being limited so that each case may be minutely and leisurely examined and thoroughly understood. The list of teachers includes some of the most eminent men in the various departments of practice in New York. It is managed by the Board of Directors which includes Fordyce Barker, Hastings Hamilton, Addis Emmet, Lomas, and Weber.

I am certain that there is nothing of this kind in Great Britain, and I never saw anything on the Continent with which I could compare it.

American doctors regard a run over to Europe every few years as a kind of class-taking, in a cosmopolitan post graduate college, and from what I have seen of surgical practice on our own continent, in this country and in America, I have no hesitation whatever in recording my

opinion that it would be vastly beneficial to both continental and English surgery if return visits were made in larger numbers. I do not say we are lacking either in surgical culture or in earnestness of purpose, but on the Great Western Continent there is an enthusiasm, a vivid interest in life, a regular go-a-headedness of which it would be well if we had a stronger infusion. The general summary of my visit to the United States, and to Canada, may be briefly put in the statement that no Englishman can obtain a reasonably full grasp of how the world is moving, or of the numerous phases of life, medical and surgical, as well as others, until he has seen life across the Atlantic.

I purpose in this paper only to tell you in a running sketch what I saw from day to day as I passed from one city to another, and to give you my general impressions of what I saw. This will answer the request made to me far better than any elaborate disquisition upon specific subjects, as such a paper would require a much longer stay, and a deeper critical investigation than was possible in the time at my disposal. Let me say here in passing just a word upon the subject, which was raised by a paragraph in a recent number of one of our leading Medical Journals. I mean the position and competency of the surgeons on the "Atlantic Line Steamers." Of course I saw only two of these gentlemen, one on my outward journey, and the other on my return. But if I may take them as samples of their class, I do not hesitate to say that the insinuations contained in the paragraph in question amounted to a grave mis-statement. It so happened that on both of my journeys, there were cases on board of very considerable gravity, which as a matter of course formed a subject of professional conversation between myself and the surgeons of the ships, and I express my opinion with-

out the slightest hesitation, that for culture and professional competency these two gentlemen were quite equal to anything which is usually met with in our life on land. As regards their social position they are treated thoroughly well by the companies, in whose service they are, and by the passengers with whom they are in daily contact, and I would point out that no kind of life can be regarded as more harassing than that in which a man may be shut up for ten days, with a case of the gravest possible kind, and absolutely removed from any advice or assistance from professional brothers, save by the accident of some of the passengers belonging to the same craft.

I never fully understood what a terrible thing this isolation may be, until I had a little experience of it, on my own account, on board one of the steamers on the St. Lawrence. I left Montreal about 8 o'clock in the evening for the night journey to Quebec. About an hour after I was comfortably in bed and asleep, I was roused by one of the officers of the ship, to whom my presence on board had been communicated, to come to the assistance of a young lady, who was said to be bleeding to death. I hurriedly dressed, and when I reached the ladies' cabin I found that the sufferer had accidentally broken a pane of glass with her elbow, and had inflicted a severe wound on the fleshy part of the arm, from which she had lost a very large quantity of blood. The hæmorrhage had fortunately been arrested by a rude kind of tourniquet, and round the couch were gathered a number of terrified priests and nuns who were engaged in arranging a service for the dying. A steward held a smoky oil lamp, and the helpless captain stood by with an antiquated medicine chest. It became at once perfectly clear to me that the brachial artery had been injured, and so much blood had been effused amongst the

tissues that the task of securing the bleeding points would be no easy one. The only instruments available were a bleeding lancet, a pair of dissecting forceps, and an old fashioned aneurism needle. Fortunately amongst the drugs there was a small bottle of chloroform, and after much difficulty in overcoming the terrors of those who surrounded me, I put the patient under chloroform, and an incision over the place where, after a lapse of some 20 years, I still had an idea the brachial artery might be found. Luckily for myself, still more luckily for the child, I stumbled upon the vessel and tied it, and I venture to say, I never in my life was more devoutly thankful than to see that patient, three days afterwards in a condition of convalescence. I have since been informed that her recovery is complete.

After I landed, the first city I visited was Boston, perhaps the most famous of the cities of the States in medical as in other matters. Amongst the members of its medical profession were many old friends, and during the few days I stayed there I think I may say I was enabled to see everything. In the first place, I saw a monument erected not so much to an individual as to the accomplishment of a great discovery, the establishment of a great principle. In the large square of the city a graceful erection of stone, known as the "Ether Monument," commemorates the date upon which it was ascertained that a vast amount of human misery could be relieved with mathematical certainty, and the date from which the greatest triumphs of surgery must be reckoned. I need not tell you that to myself this monument had a special interest, for without anæsthesia the whole realm of work to which I am devoted could never have been built up. Thence I was taken to the Massachusetts General Hospital, where I saw the sponge upon which the ether

was given to the first patient upon whom an operation was performed while in a condition of profound artificial sleep, and the theatre in which this great triumph was achieved remains much the same as it was then. The hospital itself is a magnificent building of granite, built very much on lines of hospitals of its time. It was built in 1784, and on account of its immense solidity, the original building seems to have been very little altered, though many additions have been made to it. One of these is of a very noteworthy character in the form of a new out-patient department, recently erected at the cost of a young gentleman now studying medicine within its walls. Originally built outside the city, like our own institution in Summer Lane, the hospital is now surrounded, though not closely, by buildings on all sides, and the rapid growth of the population here as elsewhere in America may be well indicated by the statement made to me by one of my surgical friends, Dr. Homans, who is attached to the hospital. He is by no means an elderly man, yet he could tell me that whilst a youth he had often shot wild ducks in the hospital grounds.

It was of course towards the practice of abdominal surgery that I directed most of my enquiries, and I found that in Boston its progress is rapidly becoming satisfactory. Dr. Homans visited me here about two years ago, and he has confessed himself as having been largely converted to my views and methods of practice. He showed me a series of fifteen cases, some of them of an extremely serious character, all in progress of recovery, and this in spite of the enthusiastic Listerism to which he subjects all his patients. But his methods have become very much simplified by his experience in England, and he was good enough to admit his indebtedness to what he saw here. He does not perform any of these operations in the public

hospital, most of them are accomplished in a small and very well regulated institution at the head of which is an English lady belonging to a sisterhood. During the last twelve months he had performed twenty-seven ovari-tomies without a death.

Perhaps the most interesting building in Boston for me was the new medical school, which forms a department of Harvard University. This building was opened on the centenary of the establishment of the School with an address by Dr. Oliver Wendell Holmes, the Emeritus Professor of Anatomy, and in the theatre devoted to the teaching of that science I saw a most striking portrait of the "Autocrat of the Breakfast Table," appropriately placed on the scene of his labours. He has secured himself a niche high in the temple of fame, as a poet and as a writer of fiction, but he has a still higher place in the memories and the affections of the thousands he has taught in this school. Dr. Holmes delivered an address of marvellous eloquence at the opening of the new building of the Medical School on the 100th anniversary of its existence, and some of the passages in it are worth quoting, alike for the brilliancy of their language and the quaintness of their thought. He tells us for instance that "we are in the habit of counting a generation as complete in 30 years, but two lives cover the whole century by an easy act of memory. I, who am now addressing you, distinctly remember the Boston practitioners who walked among the dead after the battle of Bunker's Hill, and pointed out the body of Joseph Warren amongst the heaps of slain." He tells his hearers that then there were "Three teachers only, where we have forty or nearly that number! But when the great University of Göttingen was established the illustrious Haller filled the one chair of Botany, Anatomy, Surgery and Medicine.

I called it a chair. It was rather a settee of Professorships." The buildings themselves are certainly the most perfect in their arrangement and the most complete in their appointments of any buildings I have ever seen erected for a similar purpose with perhaps the exception of the new buildings of the University of Edinburgh. And finally of this beautiful building, the autocrat of the breakfast table thus speaks at the close of his address. "It stands solid and four-square among the structures which are the pride of our New England Venice—our beautiful metropolis, won by well directed toil from the marshes, the creeks and the lagoons, which were our inheritance from nature. The magnificent churches round it let in the sunshine through windows stained with the pictured legends of antiquity. The student of nature is content with the white rays that show her just as she is; and if ever a building was full of light—light from the north and the south—light from the east and the west—light from above, which the great concave mirror of sky pours down into it—this is such an edifice. And over all this rise the tall landmarks, which tell the dwellers in our streets, and the traveller as he approaches, that in the home of Science, Arts, and Letters, the God of our Fathers is never forgotten, but that high above these shrines of earthly knowledge and beauty are lifted the towers and spires which are the symbols of all human aspirations, ever looking upward to Him, the Eternal, Immortal, Invisible."

On the Library table, bearing marks that it was not merely a "presentation," but a well used copy, was Mr. Sampson Gamgee's book on Fractures—a fragment of comfort for my provincial soul.

In the Warren Museum I saw many preparations, put up by the hand of Warren himself: a hand, the bony elements

of which I had the privilege of touching ; for with a quaint conceit, entirely characteristic of the man, he now himself forms part of his own museum. I need not remind you that the book which gave to the world the results of Warren's labours on the pathology of tumours was in some respects an epoch-making contribution to surgical pathology. Of John Collins Warren, Oliver Wendell Holmes tells us that he was "a cool and skilful operator of stern ambition, equipped with a fine library, but remarkable quite as much for his knowledge of the world as for erudition, and keeping a steady eye on professional and social distinction which he attained and transmitted." The main building of Harvard University is situated in the town of Cambridge about four miles from the medical school, and it has been so often and so perfectly described that I need not say anything in repetition, save to speak of the new Memorial Hall, erected as a Val halla for the alumni who died in defence of the unity of their country. I doubt if throughout the world there is to be found a nobler or more touching, or probably more enduring memorial of heroism than the beautiful vestibule of this building, where, upon plain marble slabs are recorded the names and places of death of the students of Arts, Law, Medicine, and Theology, who died in their country's service during the terrible years between 1861 and 1865.

By no means the least striking feature of American medical life is its abundant hospitality, a feature which runs through life generally in the United States. We have here our little medical social clubs which have the useful functions of promoting good fellowship and a wider culture of professional interests, and very many of us belong to these. But I have never seen this feature of our professional life carried out to the same extent as it is to be seen across the Atlantic. It happened that the

night on which I arrived in Boston was the time of one of the monthly meetings of such a club, and I was carried off to meet some fifteen or twenty men, the names of most of whom are well known on this side. There were physicians and surgeons and specialists, and general practitioners full of learning and of the quaintest fun. We started on a small steamer from the village of Waltham, where is situated the enormous factory for watches, and after some ten or twelve miles run up the river, the beauty of which certainly equalled that of anything of the kind I have ever seen, we were landed at the country house of Dr. Chaunce Blake, where we were entertained right royally. While there I witnessed one of the most effective sights I ever saw brought about by a fierce storm of lightning playing through the trees of the forest in which Dr. Blake's house is situated.

From Boston I passed on to Montreal, where began the series of engagements for the fulfilment of which my transatlantic visit had been arranged. The beauty of this city has been so often praised that it is useless for me to repeat the platitudes of my own impressions further than this, that in my memory there dwell above all others in prominence the recollections of three landscape views that I have seen. From the terrace at Malvern, from Arthur's seat at Edinburgh, from the Castle at Heidelberg, and last but not least from the hill at Montreal, from which extends a view all round and not surpassed by anything I ever saw. In Montreal I was the guest of Dr. Gardner, Professor of Gynecology in McGill University, and it was my privilege to give an address to the Canada Medical Association, the annual meeting of which had been arranged to take place during the three days just preceding the meeting of the British Association. My business here of course is chiefly with what I saw and

not with what I said, but I wish again here in my own land to repeat my acknowledgments for the brilliant reception given to me by my Canadian brethren, not so much on my own account as for the position in which they placed me, that of a representative for the time being of British surgery. During those three days I was associated with some 300 practitioners of medicine, I heard a number of papers read with discussions upon them, and I say without hesitation that nothing which was said or done at that meeting, but would have reflected credit on any medical gathering in the world. I often hear it said by practitioners in this country, whose lots are cast in places remote from the busy centres of life, that they find it difficult or even impossible to attend meetings of professional societies, and to keep themselves abreast with the growth of the science of medicine and surgery; but in that new country, and at that Congress, I found men eager and able to be present though they had thousands instead of scores of miles to travel, and it was to me quite impossible to realise the fact that men who sat next me, and who talked fluently and well of the most recent advances in pathology, who knew all the dodges and newest things in laryngology, otology, and gynecology, practised in villages, four, five, or even six days travel from the place of meeting, that many of them existed in places still unmarked on the map, without any professional neighbour nearer than perhaps a hundred miles. Some of them were even professors in flourishing medical colleges placed in large cities, which ten or twelve years ago had no existence. In the style, character, and conversation of these men, not only could nothing be detected which could mark them as being defective in general or professional culture and education, or which could place them in a rank lower than the practitioners of my own country, but I doubt very much

if, from the highest to the lowest in our own ranks, we were to take 250 or 300 of our men at random, we could compare favourably with them.

Instances occurred every now and then to me of a most delightful kind in coming across suddenly and unexpectedly faces familiar in college life many years ago, faces of which I had lost all recollection, and of the history of whose owners I had no knowledge at all. Men who, tired of the struggles of medical life in the old country, had settled in the new world, and had become prosperous, happy, and successful. One unfailing source of wonderment, which no amount of explanation has as yet made clear to me, is the much larger proportion of practitioners to the population which exists on the American continent compared to what we have here. In England we have about one doctor to 1,400 people. In Canada it seems to be about one to 800, and in the States it seems to be about one in 600 or 700, yet they seem to be better paid, to be less hardly worked, to be more prosperous and successful than we are here, and to be in much better social position than we can boast of. The latter fact most especially struck me, and it was proved to me in a great variety of ways. But perhaps I cannot give this impression more clearly, than by taking an extract from the speech of a Boston physician recorded at the time of the opening of the New Medical School. He gives his impression as it were from the other side, and certainly there is a singular concurrence in our experiences. "Dining," he says, "with two Englishmen a few years since, one an Oxford Professor, the other the brother of a lord, I was surprised to hear their views on the social standing of the Medical Profession, and could not help contrasting their position here, where, if not all autocrats, they are all constitutional, and some of them hereditary monarchs

accompanied by 'honour, love, obedience, troops of friends.'"

Another source of surprise was the large number of medical schools; thus in Montreal, a city of 141,000 inhabitants, there are no less than four of these schools—two catholic and two protestant—and although there is only one of great importance, still all of them are well officered and well appointed, and from what I could see of the results of their training, I am unable to say that any of them can be charged with inefficiency. In Toronto there is a magnificent university, the President of which is the famous archæologist, Daniel Wilson, and two medical schools, the buildings of both of which I inspected with care, and I venture to say that they compared very favourably with the school in our own town, or indeed with any provincial medical school as well as with a large number of our metropolitan schools. The tendency towards the downward competition, which would otherwise be inevitable in medical education as a result of an undue number of centres of medical education, is prevented by the establishment of that which we most of all want in this country, a guarantee on the part of the state of a minimum amount of medical education. The only defect of this state control, so far as I could understand it in Canada, is that all the provinces are not agreed as to what this minimum shall be, yet each province seems quite capable of protecting its own interests. At one meeting I heard a very remarkable and exhaustive speech on the subject made by my friend Dr. Howard, the Dean of the Medical Faculty at McGill College, and I was very much pained to learn from him that they have to contend in Canada against exactly the same evil influence which we object to here, exercised by a few of the British medical corporations. With so many degree-granting

bodies as they have, it is perfectly impossible to expect a uniform quality of education. It happens of course that some of the colleges pass inferior men who are rejected by the State Examining Board. These rejected ones are very much in the habit of running over to Great Britain and speedily returning to their native province armed with a parchment granted by one or other of three well known corporations in this country, all of whom shall for the present be nameless. As British qualifications these diplomas, I understand, are allowed to over-ride the decision of the State Examining Board, and thus mischief, which we might well confine to our own borders, is carried across the Atlantic. The complaints on this subject are loud and frequent, and they add another to the many strong arguments which we are at present urging in favour of the reform of medical education. Only one other fact concerning this matter needs to be alluded to, and that is that these state examining boards, which are practically the general medical councils of the province, though technically appointed by the Government, are subject to the universal suffrage of the profession.

Of the hospitals of Canada, I can say nothing but what is favourable. Dr. Hinkston the distinguished surgeon of the Hotel Dieu and others, took great trouble to show me all their details. Their appointments are equal in every respect, and in some respects are far superior to those to be seen in any but the newest hospitals in this country. I spent a long afternoon in the hospital at Toronto, and I saw there the results of surgical work as brilliant as any to be found in Great Britain.

Unfortunately the time of my visit to Canada was such that the schools had not re-opened for the winter session, so that I saw nothing of them in actual work.

Of the cities of the States, the first I visited was Albany,

the capital of the State of New York, a city famous as being the seat of some of the earliest Dutch settlements. The cities of the United States differ in many marked respects from those of Canada, and many differences quite as striking are to be found in the characters and habits of their peoples, but these differences do not extend into matters affecting my medical notes. In Albany, I found two large hospitals, one of Catholic foundation, and the other a public institution somewhat under State control. I was the guest of Dr. Vanderveer, who is attached to both of these institutions, and he was kind enough to give me opportunities of meeting the staff of both of them, and what must be considered by far the greater number of the profession of the city and its neighbourhood. Here, as in Canada, I was very favourably impressed with the style of the men I met, and here again, was pained by the fact I have already alluded to, evident on all sides, that my profession in the States has a social position and influence far greater than it enjoys here. There is in Albany a very large and successful medical school with about 250 students. There is an abundance of clinical material, the students are a very earnest and well conducted body of young men, and their professors uniformly give them a character for steadiness and decorum, which perhaps might excite the envy of some similar bodies here. I had an opportunity of delivering two clinical lectures at this school, and I was asked to perform operations in each of the hospitals, both of which tasks I undertook with very considerable hesitation. In the first place, as I appeared before my medical brethren as a representative of British surgery, and as I never in my life had any opportunity of delivering such a thing as a clinical lecture, I very much feared my performance would prove extremely unsatisfactory; for the delivery of clinical lectures, like anything

else, can only be well done by those who are accustomed to it. Our arrangements in England, in this particular, certainly do seem to be defective; for I could hardly get my American hosts to believe it possible that anyone who has at his command such a mass of material as passes through my hands should never have had one single opportunity of making that material the means of instruction.

The operations I undertook with still greater hesitation; for I had so often and so strongly objected to the performance of abdominal operations in large general hospitals, that I could not undertake their performance without laying myself open to grave charges of inconsistency on the one hand, or on the other of subjecting my patients to an unjustifiable risk. It was pointed out to me, however, that I had been invited to America as a sort of missionary, and that in so far as the kind of work I did and its results had been made the subject of mis-representations, and mis-statements, it was my duty to emphasise my missionary statements by actual performances, and that this could be done most completely before large audiences of practitioners and students. Further, they argued that the mere performance on this ground of such an operation under the circumstances to which I objected would counter-balance, and even justify the increased risk to which I believed the patients would be subjected. Upon this specious reasoning I was persuaded to perform a number of operations with the result that all of them recovered. I am therefore somewhat shaken in my belief that the risks are so great as I had asserted them to be; but on the other hand, as they were all done without the slightest antiseptic precaution, I am more than ever persuaded that ill results are to be accredited rather to bad surgery than to malevolent germs. One of the cases at Albany was

singularly satisfactory, as it included an accurate diagnosis of a solid ovarian tumour, and of uterine myoma, and ended in the removal of both. In New York, at the Bellevue Hospital, I had an equally satisfactory effort in being able to diagnose and successfully deal with a very typical instance of pyosalpinx.

I need not say that the subject of "Listerism" was one upon which I evinced much interest and curiosity, and made many enquiries about it amongst my professional brethren in America. Perhaps I may also assume that what I have to say about it will be taken by my hearers with the qualification that as I have now, for over three years, ceased either to accept Lister's doctrines or to follow his practice, and have obtained increasing success thereby, I may be regarded as more likely to collect evidence in favour of my own views than against them.

The statements made and the rules laid down by Lister and his disciples have been always so precise, not to say dogmatic, that one of the great difficulties which I always have had in connexion with the scheme, was that the practice and details recommended were subject to such constant alteration, that from month to month there had to be a constant replacement of old plans by new ones, and there was a constant and endless variation in the details of the treatment. This has always seemed to me to be absolutely fatal to any logical discussion of the doctrines upon which the practice is based. If we assume, what no body can doubt, that specific diseases are produced as the result of the growth within the body of specific entities, and if we can have an assured statement that by chemical or mechanical treatment these living germs, or whatever may be the last word which has been used to identify them, can be destroyed, the whole question of such diseases is brought within the limits of mathematical certainty.

Prevent the access of the disease-bearing-entity, and the disease will not occur, nothing can be simpler. But the followers of Lister proceed a little further ; they assume that cases of death after operations have specific characters as clear and distinct as those, for instance, of scarlet fever and small-pox. And from this assumed analogy, and upon this assurance, they base and establish all the infinite and increasing variety of processes for the destruction of the wicked germs. But from my point of view I fail to see the analogy which is assumed. I have for years been struck with the fact that the conditions under which patients die after operations assume such endlessly varying forms, that I have come to the conclusion that any doctrine which takes for granted that these conditions can be so grouped as to build up forms of specific disease, is based entirely upon insufficient observation and inaccurate knowledge of the facts. This view has obtained a stronger and stronger hold upon me, as my experience in my special line of practice has accumulated. Watching cases from time to time that had done badly I am satisfied, that hardly two of them died in precisely the same way and from precisely the same cause, and I am therefore profoundly convinced that to assume that every patient, or at least the majority of the patients, who die after abdominal section, succumb to some septic peritonitis or some septic something or other, is only to cover our ignorance with a cloak, and to bar the way for real advance.

I do not think that any contribution to the literature of abdominal surgery has done so much harm as that column in Sir Spencer Wells' book, in which a terribly long series of fatalities is ascribed to "septicæmia," and "septic peritonitis." Some of Sir Spencer's deaths are put down as having occurred from "peritonitis" simply, but through-

out the book, from board to board, there is not a word which explains the different use of these three terms. I should like immensely to be told how a pathologist is to discriminate between peritonitis that is septic, and peritonitis that is not, and it is of the utmost importance that such a difference should be clearly defined, for it is the merest folly to put up a theory and then distribute manufactured instances around for its sustenance as has been done by Sir Spencer Wells.

I do not mean to say that there may not be specific germs which may be conveyed into the abdomen of the patient by accident, germs which may kill the patient, but I do say that the evil influence of Lister's teaching has been over and over again instanced in the constant tendency shown by too many of his disciples trying to cover faults that could be avoided, and bad surgery that might be improved, by attributing the disaster arising from them to a supposititious germ. The conclusion of this part of what I want to say is this—that after innumerable statements that this plan, that detail, or the other substance, an all permeating spray, a piece of lac plaster or a mass of thymol gauze, or eucalyptol, form irresistibly destructive agents for the germ, we have the astounding fact that one after another these nostrums are given up, declared to be inefficient, something new is advanced, in its turn to be discovered as a fraud, and thus year after year the process is repeated. (It is somewhat curious that since this was written, I have read the address of Sir Joseph Lister at the Clinical Society, in which he admits having twelve months ago expressed an over-weening confidence in his previous agents, and now he recommends an ingeniously concocted mixture of blood serum and corrosive sublimate with a confidence as great, and probably as over-weening as in previous instances. This

constant and confident advance and humiliating retreat is quite enough, if no other argument were needed to show the fallacy of the whole thing.)

These were the views which in very many instances I laid before American surgeons, and I did not find in a single instance that the facts could be disputed. Amongst all with whom I talked I found only one who still used what I suppose I may, without any disrespect, call the old fashioned carbolic method, with the spray and protective and solution, and plaster and gauze ; so far as I could discover the days of that sort of thing on the American continent are rapidly coming to an end.

Our Transatlantic cousins are greatly infected by German methods of proceeding, and I understand that the last new germicide is corrosive sublimate. A large number of the American surgeons now perform their operations under an irrigating stream of a very weak solution of this salt, but they are by no means agreed either as to the strength of the solution required, or of the completeness with which it should be used. One of the most distinguished of American surgeons told me that he is now quite satisfied that sponging over the wound after the operation is completed with a .1 per cent. solution is all that is necessary, and he states that his results are quite as satisfactory in every way as when he used the cumbrous, expensive and troublesome method involved in the use of carbolic acid.

The next city that I visited was one famous in the annals of all historical affairs in the new country. I mean Philadelphia; and no place in the United States can give a better idea of the enormous progress which has been made in America, in every phase of life. When I reached that city the medical schools had opened, and I was able to see them at work. I was invited to lecture and

demonstrate in the Jefferson Medical College, and was honoured by a very large audience of practitioners and students. Here as elsewhere I can say nothing but in praise of the style and appointments of both schools and hospitals; perhaps of all the schools which I visited the one which struck me most, is the Women's Medical College of Pennsylvania, which issued in May last its thirty-fifth annual announcement. It has a body of teachers twenty three in number, of whom a few belong to our own sex; but it is worth while saying that the demonstrators of anatomy, surgery, practice of medicine and obstetrics, are all ladies, and the Professor of Obstetrics is Dr. Anna E. Broomhall, who favoured me with a visit here last year. The building in which the school is conducted is very large and splendidly appointed, and attached to it there is a large General Hospital with lying-in wards. The staff of this hospital is entirely feminine, and in its theatre all the operations of surgery have been successfully performed by lady surgeons. Last year twenty-six degrees of Doctor of Medicine were granted by the faculty, and from the perusal of the curriculum, as well as conversation with some of the graduates, and by discussion of the merits and demerits of the whole question with some of its friends and some of its opponents, I am quite satisfied that the lady graduates of Philadelphia are quite as carefully trained as those in any other medical school. When I tell you that last winter one hundred and thirty-two students matriculated in this school, that the theatre in the hospital is large enough to hold three hundred sitters, and that about four thousand patients every year pass through the hospital, I think I shall have said enough to prove to you that in the United States at least the practice of medicine by women has become quite an accomplished fact. There can be no doubt from

what I heard from their male competitors that large numbers of these women succeed in securing a fair share of public confidence. Unfortunately, although they have received a much fairer share of assistance from their medical brethren in America than their sisters have here, their path has not been quite free from obstruction, and in many parts of the states they are not yet admitted to the equality of professional position, which I have always claimed as their right. Yet I must say on behalf of the medical men in America, that they have behaved far more generously to women desiring to study and practise medicine than we have in this country. On both sides of the Atlantic the prejudice against them, altogether unnecessary and entirely without justification, is slowly passing away, and I hope ere long to see measured out for them everywhere that justice which their claims entitle them to.

The views which I personally expressed in a paper read before my professional brethren in this town twelve years ago, have received ample justification from my experience in Philadelphia. These views at the time brought down upon me words of the strongest condemnation; I might repeat them here, but I prefer to take them as expressed almost completely by Dr. Oliver Wendell Holmes in the address I have already quoted, "I have always felt that nursing was rather the vocation of women, than general medical, and especially surgical practice. Yet I myself followed a course of lectures given by the younger Madame Lachapelle in Paris, and if here and there an intrepid woman insists on taking by storm the fortress of medical education, I would have the gate flung open to her as if it were that of the city of Orleans, and she were the Joan of Arc returning from the field of victory."

I do not think that any other point to which I might call attention would justify me in repeating an account of details which would present but slight variation, and the only other incident of which I may speak was my visit to Washington, where I had the privilege with the help of the Director General of the United States' Army Medical Service of seeing one of the most wonderful medical institutions in the world. Of course I allude to "that immense library formed, but always forming at Washington, and one of the results of which comes before us in that colossal catalogue which is one of the best proofs of the advancing civilization of the Great Republic." You are all familiar enough with the *Index Medicis*, the work of Dr. Billings and his assistants, and anyone familiar with the business of cataloguing must know what labour that represents, but if you could see the library itself your impressions of the undertaking would be immensely increased. The building in which it is situated is the old theatre hallowed by the occurrence in it of one of the most dramatic incidents of modern times, I mean the assassination of Abraham Lincoln. The building also contains a large museum devoted mainly to the exhibition of specimens of surgery, everything from the use of all kinds of warlike weapons, and there are exhibited the ghastly results of Lincoln's war, every conceivable injury inflicted by lethal methods is collected, gun-shot wounds of bone form one of the most extraordinary sights I ever saw in my life, and some of the specimens have an attraction not merely of a surgical character. Thus I saw the cervical vertebrae of Lincoln's assassin split by the bullet, which reached him in his hiding place, and the pathological collection aptly includes the enlarged spleen of Charles Giteau who murdered President Garfield.

My trip ended in New York, where I met with a re-

ception from the leading members of the profession, and from many distinguished laymen of the heartiest and most friendly kind. I lectured and operated at Bellevue Hospital before a very large audience, and I was taken round several of the other medical institutions of the city. Here, as everywhere else, I was immensely impressed with the hospitable friendliness of the people, and in conclusion I can, I think, say that if anyone here requires to be persuaded that the Anglo-Saxon race and the Anglo-Saxon tongue are destined to be for the future as they have been in the past, the dominant influence of the world, he must do as I have done, and put it within his power to write a similar rambling tissue of American Notes.

OBSERVATIONS ON A CASE OF PYO-PNEUMO-THORAX.*

BY THOMAS W. THURSFIELD, M.D. ; M.R.C.P. LOND.
PHYSICIAN TO THE WARNEFORD HOSPITAL, LEAMINGTON.

Mr. President and Gentlemen,

IN November, 1882, I was asked to see a woman in consultation with Dr. Shapley of Leamington, whose history I found to be as follows: In the previous June she had had pain in the left side with much shortness of breath. This, after lasting some weeks, got better, but she never recovered her appetite, and got thinner and weaker.

In the beginning of October she took to her bed with severe pain and fever, very short breathing and bad cough. About the 10th of October she suddenly began to cough up foetid pus and continued to do so for some days. This ceased, but she became very much weaker with great

* Read at the Birmingham and Midland Counties Branch of the British Medical Association, Nov. 13, 1884.

shortness of breathing and much pyrexia. I was then asked to see her, and upon examination I found the left side of the chest everywhere dull, even to the apex of the lung, and the apex beat of the heart to the right side of ensiform cartilage. I procured her admission into the Warneford Hospital under my care on November 9th, and the same afternoon, after having proved the existence of foul pus by means of a subcutaneous syringe, I made an incision in the back in the line of the angle of the scapula between the 8th and 9th ribs, and evacuated forty ounces of intensely foetid pus, I then inserted a drainage tube through which I found that upon coughing, air escaped as well as pus. The immediate effect was to give great relief, and to mitigate all the symptoms. Charcoal poultices were applied and tenax over all. For more than a fortnight she went on well, discharging about 3 oz. of pus a day, and always expelling air when she coughed. On the 27th she felt unwell; there was about 4 oz. of pus discharged which smelt badly. 28th. Better, upon examination apex beat of heart found to be in normal position, and vesicular breathing at apex for 2 inches below clavicle both anteriorly and posteriorly.

On Dec. 2nd, I put in a drainage tube closed at one end by means of a silk ligature, the end of which was passed through one of the drainage holes, and down the whole length of the tube and secured outside the chest. To the end of the tube I attached a small ball valve which permitted the discharge to pass out, but not air to pass in. 3rd. Very little discharge. 4th. Side swollen round the wound. On this day the temperature went suddenly up to 105, and pulse 148. The tube was now removed and about two drams of dirty looking but not offensive pus escaped. 5th. Very little discharge, temperature 103, pulse 120. 6th. Better, no discharge. 7th. Erysipelas

commenced at the wound and very rapidly extended from the middle of scapula to sacrum. For ten days she was most seriously ill with erysipelas which nearly carried her off. On the 15th she expectorated 2 oz. of most offensive pus. 16th. Erysipelas better, dying out, no discharge, so wound opened with probe and drainage tube re-inserted, connected with a long tube which led into a large bottle of carbolic water placed under the bed. From this time she went on well, but for many weeks was able, when blowing her nose, to cause air to pass through the drainage tube and up through the bottle. Once when the bottle was placed on a table so that the ward might be swept, the tube acted like a syphon and passed carbolised water into the pleura and lung, causing suffocative cough. Whenever the drainage tube was removed the cough became troublesome and the temperature rose.

In Feb., 1883, I three times injected a weak, warm, watery solution of iodine, with the result of bringing on cough, and of seeing the subsequent expectoration, on each occasion, turn a solution of starch blue. In March she again had a high temperature. A long tube was introduced, by means of a large strong probe, as far as it would go, about four and a half inches, resulting in the escape of six ounces of pus, and an immediate fall of the temperature. After this she gradually improved, and was discharged, fat and well, on May 16th, 1883, seven months after admission, but with the drainage tube still in the chest. She attended, as an out-patient, at the Hospital for about nine months to have the tube washed and cleaned. The discharge became less and less, and in March, 1884, I finally removed the tube, the wound immediately healed, and the patient became quite well. In August last she was confined of a healthy child. She is now quite well, quite fat and ruddy, no cough, and no expectoration, and weighs 12 stones.

I merely bring this case forward to show what may be done by free evacuation and drainage, even in the most unpromising cases. I am quite aware that this is now the usual practice, but I am not aware that it is so frequently done in pyo-pneumo-thorax as in empyema. I cannot say that the valved drainage tube was of much use. I think the draining into the carbolised water was of much more use, though of course the chief use of it was to sweeten the discharge which passed ; but the great lesson to be learnt all through, is the advantage of thorough and complete drainage, and the prevention of any accumulations.

It may be said that this was not, strictly speaking, a case of pyo-pneumo-thorax, but one rather of fistula communicating by a narrow sinus with a bronchus. In answer to this, I should wish to point out that air escaped immediately after the first evacuation of forty ounces of foetid pus, and that for many weeks air always escaped upon forced expiration. Some distance—about five or six inches—down the india-rubber drainage-tube which led into the bottle of carbolised water, I inserted a piece of glass, so that one could always see what was passing down the tube, and watch the oscillations of the fluid with inspiration and expiration.

I am aware that I made the incision lower than is usually recommended, but I did it designedly, because of the extent of the dulness and the obvious amount of effusion.

It is, perhaps, unnecessary to recommend that before either free incision or Paracentesis Thoracis is practised, it is well to ascertain the contents of the pleura by means of an exploratory puncture with a subcutaneous morphia syringe with a very good vacuum, and in this way withdraw a syringe full from the cavity.

I have now, Mr. President and gentlemen, to thank you very sincerely for the attention you have given to this very imperfect record of an interesting case; and if it should bring on a discussion of the whole subject of Paracentesis Thoracis, which may, perhaps, serve to elicit from those whose knowledge and experience we must respect, the rules which should guide our practice, and the best methods of performing the operation, I shall, indeed, feel that I have not wasted the time of you, Sir, or of the members of this branch who have so kindly listened to me.

ON THE USE OF COCAIN IN ACUTE AND CHRONIC AFFECTIONS OF THE LARYNX AND PHARYNX.

BY CHRISTOPHER J. LEWIS, M.D.,
ASSISTANT SURGEON TO THE BIRMINGHAM AND MIDLAND EAR AND
THROAT HOSPITAL.

THE high sensibility of the mucous membrane of the pharynx and larynx, has always been an obstacle to the performance of laryngeal, rhinoscopic, and especially endolaryngeal operations. Laryngologists have hitherto endeavoured in vain to combat the easily excited reflex action, which not only prevented operative treatment, but only too often interfered with those simple methods of examination which were essential to a correct diagnosis.

The profession then, will hail with satisfaction the discovery, by Dr. Jelinek of Vienna, a few weeks back, that a solution of cocain, when applied to the mucous membrane of the throat produces anæsthesia of that part, and too, that it possesses analgesic properties in a high degree. Dr. Jelinek was led to try his experiments, owing to the remarkable success which has attended its applica-

tion to the cornea, and the facility with which certain operations upon the eye can be performed, when a 4 % solution of cocain is locally used. I may mention, that cocain is the alkaloid of the coca leaves, it is contained only in small quantities, the leaf yielding some '02 %. The most reliable preparation is found to be the cocain hydrochlorate manufactured by Merk of Darmstadt, which is readily soluble in water, and far superior to the pure alkaloid. When a solution of cocain is applied to the mucous membrane, we shall find after an interval of one minute or so, that it diminishes sensibility to touch and temperature; that it reduces swelling of the mucous membrane; that it modifies existing pain; and finally, that it lessens the reflex excitability. By possessing these two last qualities, it has the power of facilitating laryngeal and rhinoscopic examinations on the one hand, and the performance of endo-laryngeal operations on the other, and further, that by producing a diminished sensitiveness to pain it relieves in a remarkable manner cases of distressing dysphagia which have resisted other methods of treatment.

During a recent visit to Vienna, I have had daily opportunity of watching the effects of the drug from its first introduction at Professor Schroetter's clinique, where indeed all the experiments have been carried on, Dr. Jelinek being an assistant of the Professor's, and I consider, that the success attending the experiments has been on the whole complete, for I can testify to the ease with which polypi and papillomata were removed from the larynges of patients, who had had no previous treatment. What a contrast to the tedious method we had hitherto to adopt, in order that the larynx may be tolerant of the instrument we wished to use!

Dr. Jelinek advises a 10 % solution in ordinary cases,

and a 20 % solution when the full effects of the drug are required, as in operative treatment. For pharyngeal purposes, it is well that it should be used by means of a small swab made of absorbent cotton wool, while for the larynx a thick soft brush is preferable, using the laryngeal mirror to guide the application of the brush. The solution is to be freely applied to the *whole* of the mucous membrane, and its effects will be noticed in about a minute or a minute and a half. It is well afterwards to test the state of the membrane, either with a probe, or a laryngeal sound, and if the local anæsthesia is not found complete, to make another application, and as a rule, after the lapse of one minute the membrane will be sufficiently anæsthetized to allow one to commence the operation. The effect lasts from ten to about fifteen minutes. It has been observed, and is worth noticing, that if, by a too free application we excite an excessive flow of saliva, the latter interferes with the active principle of the drug, and so we are liable to disappointment unless we apply it with care. And again, an alcoholic solution should not be used, when we have to deal with an inflamed surface, for alcohol under such circumstances becomes an irritant, and so modifies the analgesic action. For endo-laryngeal operations the 20 % alcoholic solution is used and the formula of the solution which is applied at Vienna is:—Cocain mur., 1 gramme; Sp. vini rect., 2 grammes; aq. destill., 3 grammes.

The following cases will illustrate the use of the drug. A boy, 7 years old, was admitted into Professor Schroetter's wards, suffering from aphonia and dyspnœa. On examination it was found that he had multiple papilloma of the larynx. Cocain was applied, and the professor was able to remove with ease, the greater part of the growths without exciting spasm of the glottis. One or two other applications were made, and the result was, that at the end of a week not

a trace could be found upon the ventricles, and cords of the multiple papilloma which had produced the aphonia, and the boy had fairly recovered his voice, so much so that the whisper was replaced by a good note.

A man, aged 45, was complaining of distressing dysphagia. For two months he had existed on "sour milk," and this he could only drink in small quantities. Emaciated, and almost worn out with constant pain, cocain was applied to the lingual and laryngeal surface of the swollen and infiltrated epiglottis, and the relief was most marked, in a few minutes he was able to drink a good draught of water, and for the first time for two months to take a little solid food.

I had an opportunity a few days ago, of trying the effect cocain has upon a painful ulcerated throat of septic origin. I was suffering from this form of sore throat, and had the greatest difficulty in swallowing liquids. The swallowing of saliva was at one time little short of agony, and finding no relief from the usual remedies, I had a 10% watery solution brushed into my throat the last thing at night. I was soon relieved from pain, and in the morning I was able to take solid food with comparative ease.

To sum up, the uses of cocain are :—

- 1.—To facilitate the use of the laryngoscope and rhinoscope, and so to aid diagnosis.
- 2.—To ease pain, and reduce swelling in acute affections of the pharynx and larynx.
- 3.—To relieve the dysphagia due to tubercular perichondritis, or where due to ulceration, from whatever cause of the posterior laryngeal wall.
- 4.—To anæsthetize the larynx, for the performance of all endo-laryngeal operations.

I may have something to record later on of its use in some of the acute affections of the ear.

REVIEWS.

SYPHILIS AND PSEUDO-SYPHILIS.*

THE title of this book is rather misleading, as it might be inferred from the expression "Pseudo-Syphilis" that original and special work would be attempted in differentiating those signs and symptoms of disease which are apt occasionally to be mistaken for syphilis, or which, when occurring in a syphilitic patient, owe a part and not all of their significance to its presence. But "Pseudo Syphilis" is only a fresh name for the soft chancre and its complications. Perhaps it was because the title so misled us, and because we believe there is room for good work to be done in the way indicated, that there was a feeling akin to disappointment when we found the work, although a thoroughly good and reliable text-book, was lacking much in freshness and originality.

As a text-book it is nearly everything to be desired. The accounts of the various histological changes occurring in the course of syphilis are carefully compiled from sound authorities. The clinical descriptions are on the whole good and complete, and the directions for treatment are clear, and do not swerve from that beaten track which experience has shewn to be wise and safe. It may well be argued that for the purpose of instruction it is an advantage that any doubtful or unsettled points should be avoided, and that any loss sustained by this course is more than compensated for by the clearness of description and of direction. The more advanced student, however, will hardly be satisfied with these reflections. He will notice that the account of specific skin affections compares unfavourably in many places with that which is to be found in some of the best recent works on skin diseases. The signs and symptoms of abdominal syphilis are dismissed in much too summary a manner to do justice to the importance of the subject, which is daily becoming more recognised

* Syphilis and Pseudo-Syphilis. By Alfred Cooper, F.R.C.S. London : J. & A. Churchill. 1884.

and better understood. Although comparisons are proverbially odious, he will naturally compare the whole book with the American translation of Cornil (1882), and will hardly be satisfied with the result.

Occasionally he will meet with descriptive passages which his own experience will tell him are either inadequate or incorrect. As examples of these we may notice the remarks on *copaiba-rash* on p. 98, in which it is said to most resemble *urticaria*. *Copaiba-rash* is really an exact counterpart of the eruption of measles, and in a typical case, goes through the same stages to desquamation. The effect of sudden cold on uncovering the chest rendering apparent incipient syphilitic *roseola* is not noticed.

In the differential diagnosis of squamous syphilide from psoriasis a wrong impression is liable to be produced by saying that in psoriasis the scales are much more easily separable. It is true that they are shed more freely in psoriasis, but very often in the scaly syphilide large scales may be carefully detached more easily than in psoriasis, leaving a slightly moist surface underneath.

In *Syphilis of the Heart* (p. 164), no mention is made of the case reported by Dr. Mannino (*British Medical Journal*, April 15, 1882), which was diagnosed during life, and verified *post mortem*. This is an important omission, as it is more than probable that many similar cases have escaped diagnosis. The best chapters in the book are those on "Affections of the Nervous System," and on "Hereditary Syphilis."

At the close of the book there is a short chapter on the Prevention of Syphilis written in approval of the Contagious Diseases Acts, which, in other portions of the work, are favourably referred to.

So much personal feeling and partisanship has been displayed in the discussion of this measure, that it is extremely difficult for us to tell the scientific value of statements which are made for or against it, and the work before us is, we are afraid, no exception to the general rule. When we read (on p. 312) the "cure of the disease" lightly and airily referred to, we naturally enquire if, under any other aspect in this book or in any other, the cure of syphilis is so confidently asserted.

In the immediately preceding chapter, marriage has been stated to be permissible after three years, during

the last of which the patient shall have been free from any sign of the disease. Under the provisions of the Act, how many women have been kept in confinement during three years? How many patients have been relieved at intervals by rest, good diet, and appropriate treatment, continuing between each course their life of prostitution, who, if left untreated, would probably have become so loathsome to others and to themselves as to be obliged to find some other means of livelihood? Not that we would for one moment argue from this that syphilis should go untreated; or that treatment, whether voluntary or compulsory, may not tend to diminish the severity of the disease; but as each female lock patient, after a short course of treatment, just sufficient or barely sufficient to suppress visible signs of the disease, passes from observation, the surgeon cannot help wondering how much evil to others will be connected with her future history.

In conclusion, there is ground, we think, in the work before us, for the suggestion that more would be done for the advancement of surgery if those of her sons, who have experience and literary ability, simply gave us the results of that experience or undertook special investigation, instead of spending time and labour on the multiplication of text-books.

The book is without illustrations, a grave defect in a book for students.

ELEMENTS OF SURGICAL DIAGNOSIS.*

THIS book, nominally a manual dealing with elements, is in fact a treatise on surgical diagnosis after the best scientific methods, with an unswerving aim to practical usefulness. It exceeds by nearly one hundred pages the other volumes of Cassell's well known series of annuals, to which it adds special importance. So much so, that without injustice to other works on the same subject, it may be safely stated, that Pearce Gould on surgical diagnosis is a distinct and very important addition to surgical literature.

In separating the diagnosis of injuries from that of

* Elements of Surgical Diagnosis. By A. Pearce Gould, M.S., M.B., Lond., F.R.C.S., Eng. London: Cassell & Co. 1884.

diseases, the author admits that he has chosen a course not in strict accordance with the ways of nature. But his line is to be commended as possessing the advantage of greater simplicity. It is not so easy, however, to assent to the heroic exclusion of some subjects. The index is so full, that it extends over 22 pages, and contains references on important subjects so profuse as this:—abscess 53, tumours 73, fractures 84. Yet such words as ear, eye, ophthalmoscope, sphygmograph, stethoscope, of great diagnostic importance in many general surgical states, are not indexed at all.

On the other hand the modern scientific advances in the diagnosis of injuries of the heart, spine, and nervous system generally, are set forth by Pearce Gould with a precision and fulness which leave nothing to be desired. These meritorious qualities are indeed generally noticeable throughout the book. Thus the sequelæ of injuries of the chest are tabulated preliminary to separate description and most accurate valuation for diagnostic purposes.

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|----------------------------|---------------------------|
| (a) Muscular rheumatism. | (g) Gangrene of the lung. |
| (b) Subpectoral abscess. | (h) Mediastinal abscess. |
| (c) Peripleuritic abscess. | (i) Pericarditis. |
| (d) Pleurisy. | (k) Myocarditis. |
| (e) Empyema. | (l) Endocarditis. |
| (f) Pneumonia. | (m) Pneumocele. |

The diagnosis of pulsating tumours is worked out after this comprehensive enumeration :

- | | |
|----------------------|-----------------------------|
| Fusiform aneurism, | Tumours over arteries, in- |
| Sacculated aneurism, | cluding abscess ; |
| Varicose aneurism, | Cyst, and solid tumours ; |
| Cirroid aneurism, | Ruptured artery or ruptured |
| Aneurismal varix, | aneurism ; |
| " Pulsating tumour," | Tumours situated over aneu- |
| Encephalocele, | risms, especially abscess. |

Medical Surgery, more properly so called, has full justice done to it under the headings of

- | | |
|-----------------------|--------------|
| Fever, | Exhaustion, |
| Fat embolism, | Tetanus, |
| Pulmonary thrombosis, | Hydrophobia. |
| Delirium tremens, | |

The importance of and the difficulties attending individual symptoms is also well analysed ; *e.g.* :—

The surgeon may fail to obtain the sense of fluctuation—

(1) Because of the great depth of the fluid ; (2) Because of the small size of the swelling rendering the manipulation very difficult ; (3) Because of the extreme tension of the fluid ; (4) Because of the extreme lack of tension of the fluid.

He may wrongly suppose that he obtains the sense of fluctuation—(1) If the tumour be very elastic ; (2) If the tumour be very soft ; (3) If the tumour be very movable.

In brief, Pearce Gould's *Elements of Surgical Diagnosis* is an agreeably readable and easily understandable book. Above all it is an honest book, worthy of being consulted by any experienced surgeon in difficulty and doubt, and of being chosen as a student's guide in the clinical wards, in the out patient room, and in the operating theatre.

TUMOURS OF THE BLADDER.*

ANY publication of Sir Henry Thompson's upon diseases of the Bladder is welcome as likely to contain valuable information even upon well worn subjects, but when he comes to treat of a corner of surgery hitherto almost neglected his writing becomes doubly interesting. This present work is based mainly upon the study of twenty cases under the care of the author, in all of which exploration of the bladder detected a growth which was more or less completely removed except in two or three instances, when nothing could be done.

The first chapter is devoted to diagnosis as a necessary part of which digital exploration of the bladder is discussed, and in the second chapter this "exploration" is treated of at some length, not only in its bearing upon tumours, but also upon other obstinate or obscure bladder conditions in which, if the operation fails to find any such cause as an impacted calculus, the wound can be taken advantage of to drain the bladder, and so, by giving it a prolonged rest, to restore it more nearly to its functions. Brief notes are given of 23 cases in which no tumour existed, but a large proportion of which were relieved by the exploration and drainage.

* Tumours of the Bladder. By Sir Henry Thompson, M.B., F.R.C.S., &c.
London : J. and H. Churchill,

The third chapter commences by reviewing the literary history and pre-existing specimens of bladder tumours, following which is a classification of the various kinds of tumours which are divided into "fimbriated papillomata," "fibro-papillomata," "tumours of a transitional type," and "heteroplasic tumours." The first practically corresponds to the ordinary villous tumour, the second and third to those former ones variously described as polypi, fibroid tumours, etc., and the microscopic structure is illustrated by four good plates.

The symptoms are briefly dismissed in a page, and are almost summed up in one word, "hæmorrhage." The physical signs are negative in the innocent growths, but the important step in diagnosis is the examination of the urine with the hope of finding particles of growth. This hope may be disappointed after repeated examinations, but help is afforded by using a small lithotrite to endeavour to seize a particle of growth if it exists, or by washing out the bladder by means of the lithotritry aspirator, and examining the washing. The last method is described as very successful.

The fourth chapter is devoted to treatment; astringent medicines administered by the mouth are rejected as useless, but styptic injections are reported to be useful, especially in cases where the tumour is only partially removable. The manipulations for removal of tumours are then fully described, and it is strongly urged that always external urethrotomy should be the first step, and that never should the bladder be first opened above the pubes, but that this more formidable proceeding should be reserved for such cases as cannot be treated through the perinæal opening. The instruments necessary for removing tumours are described and figured, an epitome of the results of the 20 operations is given, and five of the operations are described in detail. At the end a table is found of all the author's cases, with diagrams illustrating the size and attachments of the tumours.

There is one matter for regret, it is the omission of any mention of Stein's Study of Bladder Tumours, published in 1881. There is so much that is original and interesting in Stein's work, that we think it deserved notice at the hands of Sir Henry Thompson.

REPORTS OF SOCIETIES.

MIDLAND MEDICAL SOCIETY.

Wednesday, October 8th.

G. F. BODINGTON, M.D., Président, in the Chair.

Pulmonary Consumption.—Dr. Sawyer read a paper entitled Practical Comments on Pulmonary Consumption. Briefly reviewing the pathology and Clinical features of the various forms of phthisis, he said there were four well-marked varieties of pulmonary consumption; namely, miliary tubercular phthisis, fibroid phthisis, lobular phthisis, and lobar phthisis. All these forms might be variously blended in any particular case. He did not believe in the tubercle-bacillus. He did not doubt that a certain microscopic organism was to be found in and around tubercular cheesy masses in phthisical lungs, and in the sputum of phthisical persons; but he doubted that there was a bacillus which was the veritable essence and infection-germ of tubercle. He regarded chronic pulmonary consumption as a chronic inflammatory process. He had never found laryngeal phthisis apart from coexisting pulmonary phthisis. He had found ergot the most reliable drug in small and continued hæmoptysis, while he preferred gallic acid in copious pulmonary hæmorrhages. Careful observation of the pulse was of high diagnostic and prognostic value in phthisis. Dr. Sawyer commended chloride of calcium as a good general remedy, given in ten-grain doses twice daily, after food. He had used various volatile inhalations with success.

Meningocele.—Mr. Chavasse showed a large meningocele, weighing eleven ounces, which he had removed from the forehead of a child aged 14 months, under the care of Mr. Evans, of Sutton Coldfield. At the time of birth the tumour was of the size of a small apple, but gradually enlarged until the integument covering it was very tense and shining. The case progressed well for twelve days after the operation, when, owing possibly to the eruption of several teeth, convulsions supervened, and the child died in five hours.

Specimens.—Dr. Simon showed (1) a living case of Keloid; (2) a man suffering from a large Ventral Hernia.

The Annual Meeting of this popular Society was held at the Grand Hotel, on Wednesday, November 5th,

Mr. T. H. BARTLEET, President, in the Chair.

An able and most interesting address was delivered by Sir Spencer Wells, Bart., who chose for his subject Modern Peritoneal Surgery, and dwelt with pardonable pride on his own large personal share in its development. The reception given to Sir Spencer Wells was most hearty, and adequately expressed the deep sense felt by the profession generally of his honourable career, and his high standing as a surgeon and a gentleman. No one doubts that Sir Spencer Wells was the pioneer who, with stout heart, quick brain, and skilful hand, opened out the track in which others have so triumphantly followed him. It is idle, and worse than idle, to attempt to detract from these great services by directing attention to the inevitable mistakes and wrong moves which no one could escape making without the knowledge that can only come by such dearly-bought experience.

After the address a vote of thanks was moved by Dr. T. Savage, and seconded by Dr. G. F. Bodington, and carried by acclamation. Sir Spencer Wells made a brief reply.

A large number of members remained to supper, at which the health of Sir Spencer Wells was proposed by Dr. Malins, and drunk with enthusiasm.

Before the address a number of objects of interest were exhibited. Prof. Haycraft showed some physiological apparatus; amongst other things, a method of obtaining a cardiographic tracing by recording the curve obtained from the column of air in the oro-pulmonary cavity. Some beautifully prepared microscopic specimens were shown by Messrs. Parkes and Son, of St. Mary's Square, and sets of instruments were exhibited by Messrs. Salt and Son, Mr. Mappin, and Mr. Bailey. A very excellent and comprehensive display of new drugs and medical specialities was made by Messrs. Southall Bros. Their ladies' sanitary towels attracted much attention, and are now very extensively recommended by the profession.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH OF
THE BRITISH MEDICAL ASSOCIATION.

PATHOLOGICAL AND CLINICAL SECTION.

Friday, October 31st, 1884.

LAWSON TAIT, F.R.C.S., in the Chair.

THIS meeting, the first of the present session, was held in the Library of the Medical Institute.

Successful Gastrostomy.—Mr. Jordan Lloyd showed a successful case of gastrostomy, performed on August 12th last. The case was one of traumatic stricture of the œsophagus, following swallowing of nitric acid, on June 14th. The patient had quite recovered from his operation, was being fed regularly through the stomach-tube, and was gaining flesh. Howse's operation was performed in the usual method.

Renal Coma.—Dr. Saundby showed the kidneys from a case of renal coma, which had presented the complex of symptoms first described by Kussmaul in diabetes. One of the kidneys weighed $1\frac{1}{2}$ ounces, and was in an advanced state of atrophy; the other was dilated into a large sacculated tumour, in the wall of which extensive hæmorrhage had occurred. Both kidneys contained small calculi.

Gouty Teeth.—Dr. Saundby showed a patient, the subject of chronic constitutional gout, and also plaster-casts, to illustrate the type of teeth seen in gouty persons, where these structures are worn down so as to be very little above the surface of the gum. He regarded this peculiarity as quite characteristic, and of great diagnostic value in many cases of obscure disease, depending upon the gouty diathesis. He referred to a recent statement by Dr. Dyce Duckworth, that, out of one hundred typical cases of gout examined by him, the teeth were sound and well formed, and expressed his dissent from the general accuracy of the conclusion drawn from that observation.

Myoma.—Mr. Lawson Tait exhibited a typical example of a soft œdematous myoma, which he had removed the day before by abdominal section. Before the serum was drained from it, it turned the scale at 48 lbs. It had been growing, as those tumours generally have, for a very long

time. The patient had been under the care of another surgeon for a period of nine years. She was reduced to the last stage of anæmia, with face and limbs swollen, and the abdomen occupied by a large quantity of pinkish coloured serum. The operation was perfectly simple and easy, and without any kind of complication. The patient had been the subject of exhaustive hæmorrhage, and the only trouble was the extremely diminished condition of her recuperative powers. The tumour, as usual, consisted of one large mass, encircled by an uniform thick layer of uterine muscular tissue, clearly defined as a capsule. The tumour itself consisted of trabeculated myomatus tissue, infiltrated with enormous quantities of serum.

Tumour of Orbit.—Mr. Lloyd Owen showed a patient with a hard firm tumour on the floor of the orbit, which was regarded as probably a sarcoma.

Very Large Epulis.—Mr. Bennett May showed a tumour of fibrous nature which he had removed, a few days before, from the alveolar margin of a woman aged 50. The mass was pendulous, and of the size of a large orange.

American Notes.—Mr. Lawson Tait delivered an interesting address entitled "American Notes." V. p. 241.

MEDICAL NEWS.

QUEEN'S HOSPITAL.—Mr. John Clay has resigned the post of Obstetric Surgeon to this Hospital, and has been appointed Consulting Surgeon. We congratulate Mr. Clay on this graceful but well earned recognition of his long and priceless services. Sir Spencer Wells reminded his hearers how much Mr. Clay's labours were appreciated in the little band who, with him, worked out the earlier problems of ovariectomy. It is not creditable to us if we forget the old soldier who fought in the trenches, and bestow all our praise on the younger recruits who have marched on to victory. Mr. Clay has done honour to this town and to his profession; may he live long in the enjoyment of the confidence of his patients, and the society of his friends, relieved of the laborious duties of Hospital

service.—At a meeting of Governors of this Hospital, held on Tuesday, Nov. 18th, it was resolved to appoint two Honorary Surgeons to the Obstetric Department. The name of Mr. A. F. Hawkins, for many years House Surgeon to the General Hospital, and at present one of the Surgeons to the Lying-in Charity, and Casualty Surgeon to the Queen's Hospital, is mentioned in connection with these posts.

DEATH IN THE POT.—We glean the following details from a paper by Dr. Geo. H. Rohe, of Baltimore (Western Medical Reporter):—

Milk.—Mr. Ernest Hart has collected reliable evidence showing that up to 1881, fifty outbreaks of typhoid fever, fifteen of scarlet fever, and seven of diphtheria, had been observed, in which the origin of the outbreak had been traced to the use of milk into which the germs of these diseases had been introduced. At the time of writing (September 11th) one of the Baltimore newspapers contains a brief report of an investigation into the causes of a local epidemic of typhoid fever at Elkton, in this State. The conclusion reached by Dr. Chancellor, the Secretary of the State Board of Health, is to the effect that the disease has been spread by infected milk. Cows are not infrequently attacked by an acute febrile disease called "the trembles." The milk of cows suffering from this disease produces severe gastro-intestinal disorder, collapse, fever, etc., in the consumer. This disease, called "milk sickness," is fatal in a pretty large proportion of cases. It is said that the flesh of animals with "the trembles" will, if eaten, produce similar dangerous effects. A late writer (Dr. Beach, of Ohio) estimates that 25 per cent. of the Western pioneers and their families died of this disease. A disease identical with pulmonary consumption in man frequently attacks cows that are kept in dark, damp, and ill-ventilated stables. It has been asserted, with apparently good reason (although it must be stated that the assertion has been denied), that the milk of animals affected with this bovine tuberculosis may communicate the disease to human beings using it as food. If there is such danger it is evident that the source of milk used as food for children should be very carefully examined.

Cheese.—Good cheese is only very slightly acid, and slowly reddens blue litmus paper. Poisonous cheese is

very highly acid, such cheese causes vomiting, purging, burning pain in the stomach, cold extremities, and collapse.

Meat.—It is a serious problem of public hygiene to determine to what extent diseases of animals render their flesh unfit for use as food. There seems no room to doubt that the flesh of animals suffering at the time of death from splenic fever, foot-and-mouth disease, symptomatic anthrax, and contagious pleuro-pneumonia, will, if consumed, produce serious or fatal diseases in the consumer. It is well known that the use of meat containing animal parasites, such as *trichina spiralis*, *echinococcus* or *cysticercus*, will often result in very grave affections in persons eating such meat, especially if not properly cooked. In 1874 an extensive and violent outbreak of an acute disease characterised by vomiting and purging, fever and dizziness, occurred at Middleburg, in Holland. Three hundred and forty-nine persons were attacked, of whom six died. The outbreak was traced to eating liver-sausage (*Lebewurst*), in which the characteristic bacillus of splenic fever was found on microscopic examination. In July, 1877, an outbreak of choleraic disease, from eating carbuncular meat, occurred in the town of Wurzen. In the latter epidemic the bacillus of splenic fever (*bacillus anthracis*) was found in the intestinal canal and in the blood of those attacked. In Detmold, in Germany, an outbreak of violent gastro-intestinal inflammation, accompanied by high fever, occurred. Among the one hundred and fifty persons attacked three died. The disease was traced to eating the meat of a cow suffering before death from pleurisy (probably pleuro-pneumonia). In July, 1880, seventy-two persons who had eaten of certain beef and ham sandwiches in Welbeck, England, were attacked by choleraic diarrhoea. Four of the cases died. Inflammations of the lungs and small intestines were the most prominent pathological conditions found *post mortem*. The smaller blood-vessels of the kidneys were filled with finger-shaped bacilli, which, when cultivated and inoculated into guinea-pigs, rats, and white mice, produced similar pathological conditions. At Nottingham, England, in 1881, a number of persons were attacked by a similar train of symptoms after eating baked pork. One case terminated fatally out of the fifteen attacked. It is uncertain whether the meat in these two instances was from diseased animals, or whether

it had undergone partial decomposition. The former is the more probable supposition, although the organisms found were neither those of splenic fever nor swine plague, but resembled those of symptomatic anthrax (black leg, or black quarter).

Decomposing organic matter is known to be very poisonous, from the presence of compounds which have been named ptomaines. Sausage poisoning is not uncommon in Germany from this cause, the internal part of the sausage being the most poisonous.

Fish, oysters, crabs, and lobsters, apart from the idiosyncrasy of individuals, may produce poisonous effects, either from being partially decomposed or from being out of season. In the West Indies there is a peculiar form of fish poisoning called *signatera*, characterised by affections of vision and motility, with ultimate loss of consciousness. There is sometimes vomiting but no purging. In Russia a form of poisoning has been often observed from eating raw salted sturgeon, and the disease has proved very fatal.

Canned foods.—The following conclusions may be summarised:—1. Competent chemists have found tin, in suspiciously large quantities, in cans of preserved food. 2. Cases of poisoning, apparently due to some corrosive agent, have been noted after eating canned food. 3. Cases of poisoning after eating canned food, apparently due to partial decomposition of such food, have been frequently observed.

THE DISEASE OF THE SCYTHIANS.—The ancient Scythians were said to suffer from impotence resulting from atrophy of the testes, caused by constant riding on horseback. The modern Tartar is also said to be affected in the same way from similar causes, and Dr. Strahan, in a recent paper to the *Lancet*, asserts that the same fact is observed among the North American Indians, to which, indeed, he attributes in large part the rapid extinction of that race. He contends that these facts prove the dangers of “perineal pressure;” and he points out the practice of cycling, especially for young lads, is attended by the like dangers and may be expected to have identical results. He also regards it as likely to increase masturbation, early sexual indulgence, and to promote the occurrence of prostatic disease. We are poor creatures, living in a world beset with dangers, poison in our food, fevers in

our drink, microbes in the air we breath, threatened with gout if we drive, with worse if we ride, and alas, many of us unable to walk. It is also well to remember that the most dangerous place of all is our beds, for a celebrated author has informed us, as a result of his exhaustive statistical enquiry, that more people die there than anywhere else. These facts are food for melancholy reflection.

ON THE PRESENCE OF PNEUMOCOCCI IN THE BRONCHO-PNEUMONIA OF MEASLES, DIPHTHERIA, &C.—Dr. Giacoma Lumbrosa (*Le Progès Méd.*, No. 42, 1884), states that micrococci morphologically indential with those observed in lobar pneumonia may be seen in broncho-pneumonia from measles and diphtheria. He has found that these are not simply cadaveric organisms. He has not obtained any positive results by inoculation, hence he hesitates to pronounce them biologically identical.

TO REMOVE FOREIGN BODIES FROM THE EYE.—Before resorting to any metallic instrument for this purpose, Dr. C. D. Agnew would advise you to use an instrument made in the following manner: Take a splinter of soft wood, pine or cedar, and whittle it into the shape of a probe, making it about the length of an ordinary dressing probe. Then take a small, loose flock of cotton, and, laying it upon your forefinger, place the pointed end of the stick in the centre of it. Then turn the flock of cotton over the end of the stick, winding it round and round, so as to make it adhere firmly. If you will look at the end of such a probe with a two-inch lens you will see that it is quite rough, the fibres of cotton making a file-like extremity in the midst of which are little interstices. As the material is soft, it will do no harm to the cornea when brushed over its surface. When ready to remove the foreign body, have the patient rest his head against your chest, draw the upper lid up with the forefinger of your left hand, and press the lower lid down with the middle finger, and then delicately sweep the surface in which the foreign body is embedded, with the end of the cotton probe. When the foreign body is lodged in the centre of the cornea, it is most important not to break up the external elastic lamina; for if you do opacity may follow, and the slightest opacity in the centre of the cornea will cause a serious diminution in the sharpness of vision.—*Med. and Surg. Rep.*, July 5th.

FERRIC CHLORIDE REACTION IN URINE. — The addition of ferric chloride to urine may teach us—If a green discoloration ensues, it denotes the presence of bile, and also proves that the urine is rich in Indican (?). If an intensely red discoloration takes place in diabetic urine, it seems to indicate that fatal coma is approaching (?). The same reaction frequently happens in cases of cancer of the bowels, and in one case, where besides pain (which could not be definitely located) in the abdomen and gradual emaciation, no other symptom indicated the existence of a grave disease, the reaction mentioned enabled the physician to make the diagnosis of cancer of the bowel, and the *post mortem* examination is said to have verified the diagnosis. In perityphlitis the reaction ensued.—Med. and Surg. Rep., July 5th.

230, Great Colmore Street,
Nov. 15, 1884.

To the Editor of the Birmingham Medical Review.

Dear Sir,—I read with pleasure the note in the Review of November, page 234, concerning the pure drinking water with which we are favoured in Birmingham, and especially with regard to the artesian well in Digbeth. Herewith I send you the result of an examination of this water, which was made a few days ago, because I had heard of its remarkable purity :—

	Grains per Gallon.
Solid Matter (dried at 212° F)	15.00
Chlorine as Chlorides... ..	0.8
Free Ammonia... ..	0.00084
Albuminoid Ammonia... ..	0.0014
Nitrates... ..	Faint Trace
Nitrites... ..	Absent

The sample examined was beautifully clear and bright, and from the above you will be in harmony with me when I say that analysis shows it to be a very pure water. Sometime ago, during an examination of the Town supply water, I found much vegetable matter present which im-

parted quite a green tint to it, and the albuminoid was found to be as high as 0.0168 grain per gallon, but at the present moment this figure is reduced to one half: evidently this item fluctuates considerably.

I am, yours very faithfully,

FRANK H. ALCOCK,
(Analytical Chemist.)

Obituary.

F. A. MAHOMED, M.D., F.R.C.P.

WE have heard with unsurpassed regret of the death of Dr. Mahomed, of Guy's Hospital, on November 22nd, from typhoid fever. Dr. Mahomed had been long well known to the profession, not only in this country but wherever scientific medicine is known and studied, first by his able and original observations on the sphygmograph, made at a time when little was known of the subject, and he was in the place of a pioneer, afterwards as a voluminous and very able writer on Bright's disease, his first paper on this subject, "the pre-albuminuric stage of Bright's disease" in the lvii. vol. of the *Medico-Chirurgical Transactions* being quite a classic and one of the best, if not the best paper which has appeared in that series during the last quarter of a century. Still more recently he has become perhaps better known as the originator and indefatigable organiser of Collective Investigation by the members of the British Medical Association.

Dr. Mahomed was a man of essentially original mind, one of his last pieces of work was to plan an operation for impaction of the vermiform appendix, but cutting down in much the same way as for ligature of the external iliac, and getting at the appendix without opening the peritoneal cavity. This operation was successfully performed by one of his surgical colleagues under Dr. Mahomed's directions, and the patient made a good recovery. In speaking of it to the writer of this notice, Dr. Mahomed said he thought undoubtedly a life had been saved by the operation.

Dr. Mahomed was physician to the London Fever Hospital, and assistant physician to Guy's Hospital. By his death both these institutions lose an officer of the highest class, from whose future services much was to be expected. One of the best men has dropped out of the ranks, the little band of workers has lost an enthusiastic member, the profession one who had done honour to it, and many of us a loved and respected friend.

Dr. Mahomed leaves a widow and several children, who have the entire and warmest sympathy of every member of the profession in their sorrow.

Such a death, so awful, so sudden, just when success was opening to one who had toiled so painfully and so long, makes a profound impression upon the younger ones amongst us, as with trembling lips each whispers, why was he taken, when I am left?

Miscellany.

A shabbily dressed woman called upon one of our citizens for aid, claiming that she was in a starving condition. The citizen looked upon her plethoric form, estimating the avoirdupois of the superfluous fat, and answered: "You don't look like a starving woman." "I know it," she whiningly answered, "I'm bloated with grief."—*Hartford Times*.

THE MODERN VIA ET ASTRA—A MEDICAL FABLE.—Once upon a time a poor but humane physician was riding along a road which led by a dark forest, when he saw by the wayside a sick and miserable dog which had lain down to die. Moved with pity he got down from his carriage, picked up the poor animal tenderly, and gave it some food and drink. Suddenly the dog vanished, and he saw standing before him a beautiful fairy. "You have saved me from a miserable doom by your compassion," she said. "Command now anything you wish and it shall be yours." The astonished physician replied, "I am a poor man; I should like to be rich." The fairy waved her wand and extended to him a piece of paper and a bottle filled with a dark coloured fluid. "Here," she said, "is a prescription for an Infallible Compound Hair Restorer. It will never fail, and it has been endorsed by all the leading clergymen on both continents. The world is yours! Do you wish more?" "I am a quiet man," replied the doctor, and little known. I should like to be famous." "You shall be more, you shall be immortal." Waving her hand she presented to him a small dark and curiously shaped instrument. "See," she exclaimed, "it is a new and 'unquestionably perfect Pessary.' It radically restores every malposition. Your name is blown into the side. Generations of suffering women and successful doctors will read and bless you. I have tried it myself," she added, blushing a little, and vanished.—*Boston Medical and Surgical Journal*.

New Books, &c., Received.

Contributions to the Anatomy and Pathology of the Nervous System. By RICHARD MOLLENHAUER, M.D. Series iii., No. 3.—Clinical Lectures on the Practice of Medicine. By the late ROBERT GRAVES, M.D., F.R.S. In two volumes, Vol. i. Reprinted from the second edition (Edited by the late Dr. Neligan). London: New Sydenham Society. 1884.—Explanation of the Pathology and Therapeutics of the Diseases of the Nerve Centres, especially Epilepsy. By J. McF. Gaston, M.D. Advance Sheets from Trans. of Georgia Med. Assoc. 1884.—International Health Exhibition Lectures; The Rearing of Hand-fed Infants. By EDMUND OWEN, M.B., F.R.C.S. With an Introduction by Charles West, M.D. Printed and Published for the Executive Council of the International Health Exhibition, by William Clowes and Sons Ltd., International Health Exhibition, 1884.—Elements of Practical Medicine. By ALFRED H. CARTER, M.D. Lond. Third Edition. London: H. K. Lewis. 1884.—Elements of Surgical Diagnosis. By A. PEARCE GOULD, M.S., M.B. Lond., F.R.C.S. Eng. London: Cassell and Co. Ltd. 1884.—Sir Lyon Playfair taken to pieces and disposed of; likewise Sir Charles W. Dilke, Bart. By WM. WHITE. Second edition; Sixth thousand. London: E. W. Allen. 1884.—Intestinal Obstruction. By FREDERICK TREVES, F.R.C.S.; with 60 Illustrations. London: Cassell and Co. Ltd. 1884.—The Ambulance Movement in Scotland. By JAMES WHITSON, M.D., F.F.P. & S.G. Reprinted from the Edin. Med. Journal, 1884. Edinburgh: Oliver and Boyd.—Elements of Modern Chemistry. By ADOLPHE WURTZ. Second American Edition. Translated by Wm. H. Greene, M.D. Philadelphia: J. B. Lippincott and Co. 1884.

THE
BIRMINGHAM
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A MONTHLY JOURNAL OF THE MEDICAL SCIENCES.

EDITED BY ROBERT SAUNDBY, M.D.

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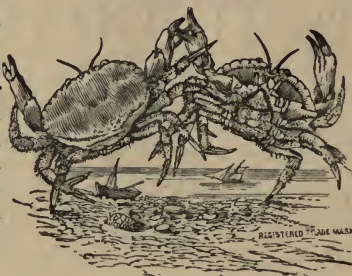
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GOLD MEDALS, MELBOURNE, 1881; ADELAIDE, 1882.

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Vide *Lancet*, 13 Oct., 1883, page 631; and "Lectures on the Surgical Diseases of the Urinary Organs" (1880) by Reginald Harrison, F.R.C.S., E., page 60.

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